

## Equine Viral Arteritis

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Equine Viral Arteritis (EVA) is an infection that is becoming more widespread among transient populations of horses such as racetrack, show grounds, and breeding farms. It first came into the spotlight due to an outbreak in Kentucky in 1984. In the US it is found in a number of breeds ranging from 1-3 % of the Arab and Thoroughbred population to as much as 80% of the Standardbreds. Different breeds seem to have different levels of susceptibility to EVA and to becoming carriers of the disease and, unfortunately, the Friesian is not immune.

### How is EVA communicated?

There two ways to contract EVA: respiratory and venereal. The respiratory spread of the disease is much like colds and flu in humans; close contact with another infected horse. This is the primary way that the disease is spread at racetracks, shows, sales, or anywhere horses are congregated. In most cases, the disease passes and the horse is no longer infectious. Unfortunately, in the case of a significant percentage of stallions, the virus can settle in some of the reproductive glands and be present in the semen, thus infecting the mare. Such stallions may continue to be carriers of the disease for some time even after their own infection has passed. In carrier stallions, the virus is shed constantly in the semen but does not appear in the respiration, blood, or urine. The virus is carried by cooled or frozen semen as well as live cover. There is no decrease in the fertility of the stallion.

### What are the symptoms?

The disease can cause a variety of symptoms such as swelling of the limbs, the genitalia in males and the udders in mares, conjunctivitis, runny nose, fever, lack of appetite, and, most significantly, abortions. The symptoms can appear in various degrees and combinations. Frequently, the symptoms are so mild that the disease goes untreated or is treated generically without specifically determining the presence of the EVA virus. In rare cases, death has been attributed to EVA.

As noted, the most significant effect of the disease is abortion in mares. Abortions may occur between three months and late in the pregnancy. There seems to be some confusion about the exact circumstances under which the abortion occurs, but the danger period seems to be between 1-3 weeks after exposure. The mare may not show any symptoms and still abort while some mares may become quite ill and not abort. Other than the possible abortion of the current pregnancy, EVA does not seem to have any long term effect on the reproductive health of the mare.

### How do I treat it?

There is no specific treatment for EVA. Typically, the symptoms are treated and the disease passes. However, care must be taken, especially in young horses, to watch for secondary infections which may attack the horse while it is in a weakened state.

### Can EVA be prevented?

There is a modified live virus vaccine for EVA produced by Ft. Dodge Animal Health. It may be safely given to stallions and mares if administered at least three weeks prior to breeding. Pregnant mares and young foals should never be vaccinated. Once vaccinated, the horse should be isolated from other, unexposed horses for three weeks. The vaccine is effective and there have been no instances of EVA in the semen of vaccinated stallions. However, it is important to note that the vaccination produces EVA antibodies in the blood, and may interfere with testing for international export.

### Has my mare been exposed?

If a mare has been exposed to EVA, her blood will contain antibodies to the virus. A test is available which can reveal the presence of these antibodies. Contact your veterinarian about testing.

If the mare has been exposed, her foals will also have the antibodies for a short time after birth. These antibodies were supplied by the mare and will fade away with time. No permanent immunity is inherited.

### What is the FHANA Policy on EVA?

At the Spring meeting of the FHANA Board, a resolution was passed that requires that each Approved Stallion be tested annually for EVA virus in his semen. The results will be published in the Spring issue of the Friesian each year.

If a stallion is EVA positive, it has no effect on his fertility. If your mare is EVA positive, either through prior exposure or vaccination, she may safely be bred to an EVA positive stallion. However, she should be isolated from any non-EVA positive horses for three weeks after the exposure.

### Where can I find out more?

As always, your primary source of information should be your local veterinarian. In addition, here are a few sources on the internet that may prove useful:

<http://www.horseadvice.com/articles/vaccinations.html>

<http://iaep.com/pages/bulletins/diseases.html>

[http://www.aiep.org/equine\\_viral\\_arteritis.html](http://www.aiep.org/equine_viral_arteritis.html)

These are just a few possible sources. Look for more at [www.yahoo.com](http://www.yahoo.com) or your favorite search engine.