

Equine Viral Arteritis

Equine viral arteritis (EVA) is a contagious disease caused by the equine arteritis virus (EAV). The virus occurs worldwide including mainland Europe. There is no risk to human health or species other than equidae.

Infection spreads through transmission of the virus between horses in 4 main ways:

- venereal infection of mares by stallions during mating
- artificially inseminating mares with semen from infectious stallions
- contact with aborted fetuses and other products of parturition
- direct contact in droplets (eg coughing and snorting) from the respiratory tract

The stallion is a very important source of the virus. On infection, the virus localises in his accessory sex glands and the virus may be shed in his semen for several weeks afterwards, or for many months or years and possibly for life. After recovery from acute illness, his fertility is not affected and he will show no further clinical signs of infection even though he may still be infectious.

Shedder stallions will infect susceptible mares during mating, or after insemination with the stallion's semen, and these mares may, in turn, infect in-contact animals via the respiratory route. It is important to note that the shedder stallion is always seropositive (ie past or existing infection indicated in a blood test) but that a seropositive stallion is not necessarily a shedder.

Breeders using AI must note that the virus can survive in chilled and frozen semen. Teasers are also a potential source of the virus and should be subjected to the same precautions as stallions. Available evidence indicates that the 'carrier' state does not occur in mares.

The variety and severity of clinical signs of EVA vary widely. Infection may be obvious or there may be no signs at all. Even when there are no signs, infection can still be transmitted and stallions might still become shedders.

EVA can cause

- Abortions
- Fever
- Depression
- Lethargy
- stiff movement
- runny nose
- conjunctivitis
- swelling of the lower parts of the legs, around the eye and of the reproductive organs.



Because of the variability or the possible absence of symptoms, clinical diagnosis is not always possible. Laboratory diagnosis is therefore essential. This requires appropriate samples, which are nasopharyngeal swabs, heparinised or EDTA blood, semen, serum and possibly urine, to be taken by a veterinary surgeon and sent to a specialist laboratory.

In blood samples, laboratories look for antibodies to the virus (serological test); in blood and other samples, they look for the virus itself (virus detection tests). Where abortion may be EVA-related, detailed clinical information must be sent to the laboratory with the foetus and its membranes.

There is no treatment available for EVA itself, although there may be treatments to alleviate some of its symptoms.