



Equine Viral Arteritis

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Description

Equine viral arteritis (EVA) is an acute, contagious, viral disease of both horses and donkeys. In Oklahoma, horses infected with EVA must be reported to the Department of Agriculture, Division of Animal Industry.

Where the Disease Occurs

The virus is present in horse and donkey populations in many countries throughout the world.

Symptoms in Horses

Exposure to EVA virus may or may not result in clinical disease. EVA is of special concern to horse breeders because it can cause abortion in pregnant mares, death in young foals and breeding stallions may become permanent carriers of the virus.

Many horses exposed to EVA will not develop signs of disease. If illness does occur, the signs may range from fever; depression; respiratory symptoms; swelling of the legs (especially the hind legs); swelling of scrotum, prepuce and mammary glands; conjunctivitis and nasal discharge. Symptoms are similar to several other diseases, such as influenza and rhinopneumonitis. The virus causes damage to the smaller blood vessels resulting in edema and hemorrhage in many tissues and organs.

How the Disease Spreads

This virus can be spread by:

- respiratory secretions
- breeding with infected stallions using fresh, cooled or frozen semen
- contaminated equipment-tack, equipment
- urine and feces
- mare to foal across placenta

Outbreaks of EVA are usually linked to the movement of animals or the shipment of semen. Viral transmission can be widespread at racetracks or on breeding farms.

Carrier stallions may be reservoirs of the virus without expressing any outward symptoms. These stallions are primarily responsible for persistence of the virus in different horse populations throughout the world.

Diagnosis

Blood samples, semen and nasopharyngeal and conjunctival swabs may be collected for virus isolation and the detection of antibodies.

There is no specific treatment for EVA and most affected horses recover completely.

Control of the Disease in Animals

Most prevention and control programs are focused on preventing or curtailing dissemination of equine arteritis virus in breeding populations, minimizing the risk of virus-related abortion or death in young foals and establishment of the carrier state in stallions.

All stallions should be tested for EVA. Positive stallions must be identified prior to breeding.

Breeding to a Positive EVA Stallion

Follow the advice of a veterinarian to institute a vaccination program for the mares to allow breeding with infected stallions. Many breed registries require notification of vaccination. Check with your registry regarding vaccination for EVA.

Vaccination Programs

Follow the directions of a veterinarian in instituting a vaccination program for your farm. Both the Jockey Club and the AQHA require notification if an animal is vaccinated. Vaccinated horses may test positive, which may impact international travel and shipping of semen.

Can People Get the Disease?

The disease affects only horses and donkeys.

The Oklahoma Cooperative Extension Service

Bringing the University to You!

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Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

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- The federal, state, and local governments cooperatively share in its financial support and program direction.
 - It is administered by the land-grant university as designated by the state legislature through an Extension director.
 - Extension programs are nonpolitical, objective, and research-based information.
 - It provides practical, problem-oriented education
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 - It utilizes research from university, government, and other sources to help people make their own decisions.
 - More than a million volunteers help multiply the impact of the Extension professional staff.
 - It dispenses no funds to the public.
 - It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
 - Local programs are developed and carried out in full recognition of national problems and goals.
 - The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
 - Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

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