



Equine Viral Arteritis

Elisabeth J. Giedt, D.V.M. , M.B.A.

Director of Engagement, Continuing Education and Extension
Center for Veterinary Health Sciences
Oklahoma State University

Oklahoma Cooperative Extension Fact Sheets
are also available on our website at:
<http://osufacts.okstate.edu>

Description

Equine viral arteritis (EVA) is an acute, contagious, viral disease of both horses and donkeys.

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. When clinical signs occur they 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. Some strains of the virus cause abortion and death in young foals.

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 and nasopharyngeal and conjunctival swabs and semen 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 your veterinarian to institute a vaccination program for the mares to allow breeding with infected stallions.

Vaccination Programs

Follow the directions of your veterinarian in instituting a vaccination program for your farm.

Can People Get the Disease?

The disease only affects horses and donkeys.

Elisabeth J. Giedt, D.V.M. , M.B.A.

Director of Engagement, Continuing Education and Extension
Center for Veterinary Health Sciences
002B Veterinary Medical Teaching Hospital
Oklahoma State University
Stillwater, OK 74078-2005
giedt@okstate.edu

405.744.8475

The Oklahoma Cooperative Extension Service

Bringing the University to You!

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

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.

Some characteristics of the Cooperative Extension system are:

- 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 for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
- 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.

Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, Title IX of the Education Amendments of 1972, Americans with Disabilities Act of 1990, and other federal laws and regulations, does not discriminate on the basis of race, color, national origin, gender, age, religion, disability, or status as a veteran in any of its policies, practices, or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, the Director of Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President, Dean, and Director of the Division of Agricultural Sciences and Natural Resources and has been prepared and distributed at a cost of 20 cents per copy. Revised 0114 GH.