

## **Advanced Equine Reproduction Elective**

by

T. Miller and Dr. Ley

4-8-01

### **Equine Arteritis Virus (EAV, EVA) Immunization**

A referring veterinarian wondered if the 21 day ban on breeding mares following EVA vaccination was absolutely necessary (although against the label ). He didn't want to vaccinate pregnant mares but also didn't want to miss breeding on the foal heat. Are the reasons to not breed within 21 days to protect the mare or the stallion? Assuming the stallion is positive or it is chilled or frozen semen, there is no risk to him. Has there been a proven risk to the mare either with regard to illness or infertility to require this "waiting period"?

Before answering the question, I would like to give a brief description of EVA. Equine Viral Arteritis (EVA) is an infectious viral disease. It can cause severe economic losses for horse breeders. This virus can cause abortions, death of foals, and stallions can become permanent carriers. EVA can be difficult to diagnose because the clinical signs resemble many other viral diseases. Clinical signs can vary from none to fever, swelling of the legs, scrotum, sheath, or mammary glands, anorexia, depression, conjunctivitis, nasal discharge, pneumonia and death in young foals, and abortion. EVA can be transmitted by respiratory secretions, venereal, in utero, or iatrogenic. There is no treatment. Most treatments, if administered, are aimed at reducing the clinical signs.<sup>1</sup>

Information collected on the vaccine produced by Fort Dodge indicates that the vaccine is a modified live vaccine that will produce titers in 7-14 days. The vaccine is approximately 95% effective and the horse will shed the virus for about 3 weeks and should be separated from other equids during this time. Horses vaccinated with this product will become seropositive.<sup>2</sup>

There is really no reason physically not to breed the mare during foal heat as long as you are using chilled or frozen semen that is from an EVA negative stallion. Ethically, it should not be done until the 21 days have passed. Some things to think about are: 1) If the mare has a nursing foal, there is a small risk that she could pass the virus to the foal in her respiratory secretions. 2.) The semen would have to be EVA negative because her antibody titer would not be high enough to prevent disease. Most breeders do not seem to mind missing the foal heat, it is a small price to pay to provide protection for the mare and possibly the foal.<sup>3</sup>

All information was obtained from the following sources.

<sup>1</sup>USDA website

<sup>2</sup>Fort Dodge, Dr. LaRosh

<sup>3</sup>Phone conversation with Dr. W.H. McCollum, Gluck Equine Research Center.  
Lexington, KY