Guidelines for Breeding a Mare to an Equine Arteritis Virus Shedding Stallion

At least 30 days prior to breeding, the mare should be tested for serum neutralizing antibodies to equine arteritis virus. A blood sample should be submitted to a veterinary medical diagnostic laboratory approved by the USDA to conduct this serological test. Based on that result the following procedures are recommended.

Antibody Negative (titer of less than 1:4) -- Non-Pregnant Mares

If the mare is found to be serologically negative, she should be vaccinated as soon as possible with the licensed modified live virus vaccine against EVA*[1] * . After vaccination, the mare should be isolated for 21 days to allow her time to develop adequate protective immunity against subsequent exposure to the virus and to prevent the minimal risk of spread of the vaccine virus to any susceptible horses with which she might come into contact.

Twenty-one days following vaccination, the mare may be bred to a shedding stallion. She should not be bred to a shedding stallion during that period.

After being bred for the first time to a shedding stallion, the mare should be isolated for 21 days from any horses on the premises serologically negative for antibodies to the virus. Subsequent breedings do not require an additional period of isolation.

Occasionally a mare may be vaccinated against EVA, but for some reason, is not bred that year to a shedding stallion. If this should happen, the mare should be vaccinated again before being bred to a shedding stallion. No isolation is necessary following re-vaccination.

Antibody Negative (titer of less than 1:4) -- Pregnant Mares

The current licensed modified live virus vaccine against Equine Viral Arteritis * is not approved for use in pregnant mares. While a mare that is in good health may be vaccinated following parturition, a mare that has had acomplicated foaling, or is otherwise not in good health, should not be vaccinated until she has regained her health. The foal should also be in good health and be at least two weeks old before its dam is vaccinated.

There is minimal risk that suckling foals out of serologically negative mares may be exposed to the vaccine virus when the mare is vaccinated against EVA.

Re-Vaccination

Mares that will be bred to shedding stallions should receive an annual booster vaccination against EVA twenty-one days prior to being used for breeding purposes. No isolation is necessary following re-vaccination.

Antibody Positive (titer of 1:4 or greater) - All Mares

Mares that test serologically positive for antibodies to equine arteritis virus can be bred to a shedding stallion without the need for prior vaccination against EVA. Antibody positive mares that are bred to a shedding stallion by natural cover should be kept separate from other susceptible horses for 24 hours to avoid possible mechanical transmission of virus from voided semen. Any vehicle used to transport such mares immediately following breeding to a shedding stallion should be thoroughly cleaned and disinfected prior to transport of susceptible horses.

Guidelines for Breeding Stallions

Prior to the breeding season (at least 60 days is recommended), the stallion should be blood tested for neutralizing antibodies to Equine Arteritis Virus.

Antibody Negative -- (titer of less than 1:4)

If serologically negative, the stallion should be vaccinated with a licensed modified live vaccine against EVA*[2] * and isolated for 30 days after vaccination. An annual booster vaccination against EVA should be given on a regular basis every 12 months but no sooner than thirty days prior to being used for breeding.

Antibody Positive -- (titer of 1:4 or greater)

If the stallion is found serologically positive for serum neutralizing antibodies to Equine Arteritis Virus, without written evidence certifying his negative serological status prior to vaccination, he needs to be tested for presence of the carrier (shedding) state. This can be determined by either one of the following methods:

- attempted isolation of Equine Arteritis Virus from two separate ejaculates collected and submitted by an accredited veterinarian to a laboratory approved by the USDA to conduct this test;

  OR

- test breeding the stallion to 2 mares serologically negative for antibodies to Equine Arteritis Virus at least twice on each of two consecutive days (four covers) and the mares checked for the development of serum antibodies to the virus 28 days after breeding.

Antibody Positive -Non Shedding Stallions

Serologically positive stallions with written certification of negative antibody status prior to vaccination against EVA by a USDA approved laboratory need not be tested for virus shedding.

Stallions serologically positive for antibodies to Equine Arteritis Virus from natural exposure that have previously been tested and found to be non-shedders (non-carriers) of the virus should have written confirmation of their non-shedder status and receive an annual booster vaccination against EVA.

Antibody Positive -- Shedding Stallions

Shedding stallions can be used for commercial breeding provided they are managed in accordance with the above guidelines. Stallion owners and stallion managers should disclose the shedding status of their stallions to mare owners, breed associations and, where required, to state authorities.Shedding stallions can be safely bred to adequately immunized mares or to mares that have tested serologically positive for neutralizing antibodies to Equine Arteritis Virus.

Occasionally, shedding stallions will spontaneously stop shedding Equine Arteritis Virus. Owners may wish to retest the semen of shedding stallions from time to time to determine if the stallion is still shedding virus.

Other Recommendations

Teaser Stallions

Teaser stallions should be vaccinated against EVA on an annual basis in accordance with this protocol.

Identification of Carrier (Shedding) Stallions

It is recommended that breed associations publicly disclose the names of those stallions registered with their breed association that are confirmed shedders of Equine Arteritis Virus.

Prevention of the Carrier State

Breeding stallions that are found serologically negative for antibodies to Equine Arteritis Virus should be vaccinated against EVA to prevent development of the carrier state.

In order to prevent the carrier (shedding) state, especially in those breeds in which the infection is widely prevalent, as well as to prevent Equine Arteritis Virus infection, colts under 270 days of age that are serologically negative for antibodies to Equine Arteritis

Virus should be vaccinated against EVA. Written certification of their negative serological status to Equine Artertitis Virus should be obtained before vaccination.

Use of Modified Live Vaccine Against Vaccine*[3] *

It is essential to have written official certification of a horse's negative serological status to Equine Arteritis Virus prior to initial vaccination against this disease.

Stallions and mares that will be bred to shedding stallions should receive an annual booster vaccination against Equine Arteritis Virus prior to being used for breeding purposes.

Notes:

1. *ARVAC®, Ft. Dodge Laboratories, Ft. Dodge, Iowa
2. *ARVAC®, Ft. Dodge Laboratories, Ft. Dodge, Iowa
3. *ARVAC®, Ft. Dodge Laboratories, Ft. Dodge, Iowa
