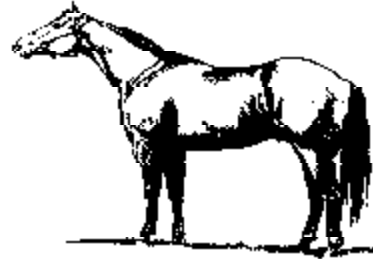


Animal Science Horse Information Series

Phone: 865-974-7294

Fax: 865-974-7297

<http://www.utextension.utk.edu/ansci>



WHEN SHOULD FOALS BE VACCINATED FOR INFLUENZA?

**Dr. Frederick Harper
Extension Horse Specialist
Animal Science Department
University of Tennessee**

We are all aware of the need for certain vaccinations in children which are given at specific times.

Likewise, certain vaccination schedules are used in horses including foals.

Newborn foals do not have any natural immunity to diseases. They normally acquire passive immunity from colostrum, the first milk. To insure that colostrum protects the newborn foal, it is recommended to vaccinate their dams about one month before they will foal.

Also, house mares where they will foal for a month before foaling. This allows them to produce antibodies against microorganisms in that environment. These antibodies in the colostrum provide the newborn foal with resistance against these microorganisms.

The routine practice has been to vaccinate foals against common diseases when they are three months of age or older. This vaccination procedure probably will change based upon recent research from the University of Kentucky.

Influenza is a common respiratory problem in young horses and is one of the common vaccinations given pregnant mares.

In the Kentucky study, 187 foals from mares immunized for influenza 30 days before foaling were vaccinated with the standard two dose vaccines at either 2, 3, 4, 5, 6 or 7 months of age.

Foals were tested to determine if they had antibodies to either the A1 or A2 subtypes of equine influenza.

The normal two-dose vaccination did not produce detectable levels of antibodies in the foals against the A2 virus, the subtype found in nature. Three doses of vaccine given at 7, 8 and 9 months of age only produced a response in 25 percent of the foals.

Vaccination against A1 influenza virus was effective in only 50 percent of the foals. But three doses of vaccine were required to obtain these results.

Most broodmares have been exposed to influenza. So, they will produce some maternal antibodies against influenza.

So, the current practice of giving two doses of influenza vaccine in the first seven months of age to foals from immunized mares is not effective.

Maternal antibodies apparently result in failure of foal vaccinations for influenza.

Another group of foals did respond to influenza vaccination at three to four months of

age. But they did not get maternal antibodies to either the A1 or A2 influenza.

Based upon these new findings, it is recommended to delay vaccination against equine influenza until foals are at least eight months old.

These results should not be transferred to other vaccines. So other vaccination programs should be used as previously recommended.

You should discuss all vaccination programs with your veterinarian.

###

Peer reviewed by Dr. Bill Backus and Dr. Fred Hopkins.