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# The Equine Report

Mare Care Stallion Evaluation Lameness Surgery Advanced Dentistry

## VACCINATIONS

Spring is finally upon us and with the change in weather come plans for another riding season. Whether young or old, pleasure or performance, vaccinations have to be part of our preparation for another year of good preventative health with our horses.

What to vaccinate with and when are recurring questions that trouble horse owners. With multiple brands of vaccines and combinations of vaccines available, and the vast difference in ages and exposure risk within our horse populations, it's no wonder there is no easy answer to this question.

The principles of vaccination are the same in all domestic animals. Exposure to a disease, or in this case a modified or killed organism that causes disease, creates a response from the immune system. The immune system is responsible for recognizing any disease causing organism and creating an army of antibodies to fight the disease.

The first time the immune system is exposed to a particular organism, it attacks it and tries to eliminate the threat to the animal. With multiple exposures to the same organism the immune system creates a "memory" of the organism and a short cut to create antibodies that will attack each individual organism faster and more aggressively than before. This is an oversimplification of the principles of administering vaccines, but by multiple exposures to an organism the immune system better equips itself to fight the disease at a later date. The end result is that vaccinating your horse does not prevent it from getting infected with the disease but better equips him/her to fight it faster, decreasing the severity and duration of the symptoms.

There are four types of commercially available vaccines: live, modified live, recombinant, dead/killed. Live Vaccines contain agents that can replicate and stimulate an immune response but do not cause the disease or make the animal sick. Modified Live Vaccines (MLV) are modified in some way so that they cause an

immune response without causing the disease. Recombinant Vaccines are created in the lab so they are technically not the "real" virus/bacteria/pathogen. However, they do create an immune response. Dead/Killed Vaccines cannot cause disease or replicate once administered; they typically require multiples doses initially followed by regular boosters.

The decisions regarding which type of vaccine to use and which particular diseases to vaccinate against depend on the age, health and exposure risk for each individual horse. A growing foal or yearling has had limited exposure to all of the diseases that s/he will encounter as s/he grows and will likely need a series of vaccines to better prepare his/her naïve immune system. The elite athlete or the summer trail riding horse will likely come in contact with horses from different barns with unknown health and vaccination histories. It is important to keep his/her immune system on alert for the most com-



mon organisms s/he might encounter in his/her travels that newfound friends and competitors expose him/her to. The retired broodmare that stays in the pasture throughout her pregnancy has specific requirements to prevent EHV-1 abortions and to improve the quality of immune protection that will be passed on to her foal. Last, but definitely not least, the older retiree needs to be vaccinated due to the fact that as horses age their immune systems weaken making vaccination even more important to protect against disease.

Vaccinations are an important part of our horses lives and preventative health program. Although they won't pre-

vent the horse from getting infected, the appropriate vaccination program will help the immune system mount a timely and aggressive response to a challenge, decreasing the severity of symptoms and duration of disease.

Based on guidelines established by the American Association of Equine Practitioners (AAEP), vaccines can be grouped into core and risk based vaccines. Core vaccines are those that are likely to pose a risk to humans, are highly infectious or are common in the area, for example: Tetanus, Rabies, Eastern and Western Encephalitis and West Nile Virus. Risk based vaccines are administered depending on the horse's risk of exposure, for example: Influenza, Rhino (Herpes Virus), Potomac Horse Fever and Strangles. Consult with your veterinarian to determine the best vaccination program tailored for your horse's individual needs.

## RABIES

Rabies is an infectious viral disease that affects the central nervous system. It is transmitted by a bite (or saliva) from a rabid animal. Rabies vaccination is a major concern in our household pets due to the fact that it is contagious and highly lethal. In 2010 and early 2011, Oregon has identified numerous cases of animal rabies in Southern Oregon's Josephine County; the affected animals include foxes, one coyote and one goat. Other than this geographic cluster, bats are the primary carriers of rabies in Oregon. While the incidence of rabies is low, the disease is invariably fatal in horses. Because of this, and the risk to public health, the American Association of Equine Practitioners (AAEP) recommends rabies vaccinations for horses and has added it to their list of core vaccines. As with all vaccines, the decision whether to vaccinate should be evaluated for every individual based on the risk of exposure.

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## EAGLE FERN EQUINE HOSPITAL

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### EQUINE HERPES VIRUS (EHV-1)

A recent increase in cases of EHV-1 associated with a cutting horse event in Utah has caught the attention of media and horse owners nationwide. EHV-1 is a common viral infection of horses that is highly contagious. Horse-to-horse contact, contaminated hands, equipment, tack, feed, and aerosol transmission all play a role in its spread. Symptoms can range from acute fever to mild upper respiratory disease or abortions. In a small percentage of horses it can cause neurologic disease (weakness, ataxia, loss of balance, inability to urinate or defecate and recumbency). The highly contagious nature of this disease makes isolation and quarantine of exposed horses critical for containment. There is no proven therapy that is effective against the neuro-pathogenic strain of EHV-1. No vaccination is proven effective at preventing this neurologic strain. EHV-1 does NOT affect humans, dogs, cats, cattle, sheep, goats, pigs or birds; llama and alpacas (camelids) can be affected. Containment is key so

limited exposure to horses associated with the show in Utah and proper biosecurity protocols are essential for control. For more information visit our website or follow us on Facebook for the most up-to-date information about EHV-1 and biosecurity protocols for your barn.

### CLINIC NEWS

Dr. Shakyra Rosario has completed the first two out of five modules for animal chiropractic certification at Options for Animals College of Animal Chiropractic in Kansas. Chiropractic is an integral part of holistic animal health care. The first module covered the basics of animal chiropractic and sacropelvic adjustments in small and large animals. The second module covered thoracolumbar adjustments and the basics of saddle fitting. There are three more modules, the last of which is in August. Upon completing the program, Dr. Rosario will be offering chiropractic services for animals.

We are happy to welcome Ashley Dunn, who joined Eagle Fern Equine in January, as our fulltime Technician.

### EQUINE PREVENTATIVE MEDICINE SEMINAR

Saturday, June 4, 2011  
6:30 PM at the Equine Hospital  
*Presented by Dr. David Asmar*  
A comprehensive review of  
vaccinations and contagious diseases  
*Please RSVP to (503) 630-4558*



#### Clinic Hours:

*Monday-Friday 8:00 AM — 6:00 PM*  
*Saturday 8:00 AM — 5:00 PM*  
*24-hour emergency service*  
*7 days a week.*  
*After hours call (503) 721-4384*



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## Equine Preventative Medicine Seminar

Saturday, June 4, 2011 at 6:30 PM at the Equine Hospital  
Vaccinations, EHV-1, Contagious Diseases & Biosecurity