

## EQUINE VACCINATIONS

Vaccinations are an important part of every wellness program regardless of species. Over time we will highlight the diseases and their vaccines, by species, that should be considered core vaccines. This month will cover the core vaccines for the horse. Taken from the AAEP, a core vaccine is one that clearly demonstrates efficacy and safety and thus exhibits a high enough level of patient benefit and low enough risk to justify their use in the majority of patients.

### Core Vaccines:

**Tetanus:** The causative organism is *Clostridium tetani*. These organisms are present in the GI tract and feces of horses as well as in the soil. The organism can survive in soil for many years. *C. tetani* requires an entry to cause disease such as: lacerations, puncture wounds, surgical incisions, and exposed tissues. The common term for this disease is lockjaw.

**Eastern and Western Equine Encephalomyelitis:** EEE/WEE is spread by mosquitoes. While each is considered regional in origin, sporadic episodes of each have been found throughout the country. Neurologic signs are what you see clinically in horses affected. These are commonly referred to as sleeping sickness.

**West Nile Virus:** West Nile is found throughout the U.S. Since 1999 24,000 cases have been reported in horses. It is maintained in an avian reservoir and spread to horses by mosquitoes and other blood sucking insects. Many of the horses that do survive will have lingering effects. West Nile also causes neurologic signs in the horse.

**Rabies:** Rabies is another neurologic disease that fortunately is found infrequently in the horse. It is spread by a bite from an infected animal. The virus spreads up the nerves to the brain where it causes its fatal effect. Even though the Rabies is not common in horses, its fatal end and public health significance make it a core vaccine.

### Common Non-Core Vaccines

**Flu/Rhino:** Influenza and Herpes virus most often cause respiratory disease in the horse. Horses that show, rodeo, or are subject to large gatherings of horses are at increased risk of contracting the disease. Our current vaccines are very good and greatly decrease the incidence in at risk horses.

**Strangles:** *Strep equi subs equi* is the causative agent of strangles. It causes abscessation of lymph nodes and less frequently internal abscesses. Most cases do not require medical treatment and horses recover uneventfully. However, this is a very contagious disease. Efficacy of all strangles vaccines is questionable.

**Herpesvirus 1:** EHV-1 can cause epidemic abortions, weak foals, or foals with neurologic disease. It is recommended to vaccinate pregnant mares during the 5<sup>th</sup>, 7<sup>th</sup>,

and 9<sup>th</sup> months of gestation to prevent these. Vaccination at 4-6 weeks before foaling has shown to increase antibody concentration in the colostrum which can decrease incidence of respiratory disease in the foal.

There are many other vaccinations for horses but these are the most important to this area. As spring is upon us it is time to plan a vaccination program for your horses.