FIRST EQUINE
VETERINARY SERVICES

Equine Vaccinations

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Based on AAEP vaccination guidelines

Vaccinations are an important part of equine healthcare and the benefit of these "routine shots" should not be underestimated. With an appropriate vaccination strategy tailored to your specific horse's needs, your equine friend can lead a happy, healthy life with little risk of infection from many diseases. Factors that play a role in an appropriate vaccine protocol include: geographical location, age of the horse, use of the horse, efficacy of the vaccine, and risk verses benefit of the vaccine used. Vaccines can be divided into "Core" and "Non-core" vaccines. Please consult with your veterinarian to develop a customized vaccine protocol for your horses.

Core Vaccines

These are recommended for **all horses** to protect against diseases that are endemic in an area, highly infectious, or zoonotic (transmitted to people by animal) and also have high mortality rates. These include: Eastern/Western Equine Encephalitis, Tetanus, West Nile Virus, and Rabies.

- *Eastern/Western Equine Encephalitis (EEE/WEE)*: Both caused by viruses transmitted by mosquitoes after feeding on an infected host. EEE is the most virulent and found in eastern and southeastern states, compared to WEE found in western US. Clinical signs include: high fever, in-coordination, paralysis, change in behavior, convulsions, and comatose state. Roughly 90% of horses affected by EEE will die compared to about 50% from WEE. The southeast is endemic for mosquito borne viruses, making appropriate vaccination for these diseases critical.
- *Tetanus:* Caused by the toxin producing bacteria, *Clostridium tetani*, found in the soil and intestinal tract that enters the body through open wounds or the umbilicus of newborn foals. Clinical signs include: muscle stiffness, inability to walk, and a prolapsed third eyelid. 80% of horses affected by Tetanus will die.
- *West Nile Virus (WNV)*: Caused by a virus transmitted by mosquitoes after feeding on a viremic bird. The disease has been in the United States for the past 15 years and can affect both horses and humans. Clinical signs include: in-coordination,

muscle tremors, paralysis, fever, change in demeanor, and convulsions. On average, 30-40% of horses affected by WNV will die.

- *Rabies*: A debilitating virus causing severe neurologic disease after being bitten by an infected animal. Clinical signs include: aggression, change in behavior, seizures, paralysis, and hypersalivation. Rabies has a 100% mortality rate. As a zoonotic disease, humans exposed to rabid animals must undergo post exposure treatment.

Non-Core or Risk Based

These vaccines are administered depending on environment of the horse and the risk of exposure. They frequently cause disease, but generally have low mortality rates compared to core vaccines.

- *Strangles*: Caused by the highly infectious bacteria, *Streptococcus equi*. Clinical signs include: fever, nasal discharge, and enlarged lymph nodes
- *Equine Influenza*: Highly infectious respiratory virus commonly found in traveling horses. Clinical signs include: fever, depression, and coughing
- *Equine Herpes Virus (EHV)*: EHV Type 1 and 4 can infect the respiratory tract, especially in weanlings and yearlings. Clinical signs include: fever, depression, coughing, and nasal discharge. EHV1 can also lead to neurological disease and abortions
- *Botulism*: Caused by a toxin producing bacteria, *Clostridium botulinum*, that enters the body through an open wound or ingestion. Clinical signs include: weakness, paralysis, and a flaccid tongue
- *Rotavirus*: a virus affecting foals in the first few weeks of life. Clinical signs include: diarrhea, lethargy, and fever
- *Equine Viral Arteritis (EVA)*: Caused by a virus that is transmitted through the respiratory tract, reproductive organs, or congenitally. Clinical signs include: depression, lethargy, dependent edema, fever, and abortion
- *Leptospirosis*: Caused by contact with the micro-organism through mucous membranes or open wounds. Commonly found in standing water containing urine from infected animals. Clinical signs include: recurrent uveitis, abortion, and acute renal failure
- *Potomac Horse Fever (PHF)*: found near Potomac River area caused by the bacteria, *Neorickettsia risticii*. Clinical signs include: fever, diarrhea, colic, laminitis, abortion

Consult with your veterinarian on which non-core vaccines are appropriate for your individual horse's needs.