# Wellington Veterinary Clinic 45015 St. Rt. 18 Wellington, OH 44090

## **Immunizations: Protecting Your Horse**

Few things will protect your horse from the ravages of disease as easily and effectively as immunizations. The vaccinations administered by your veterinarian to your horse place a protective barrier between the animal and a whole list of problems. Vaccinations are a vital part of proper equine management. If incorporated into a program that includes regular deworming, an ample supply of clean water, a good nutrition program, and a safe environment, you and your horse will be all set to enjoy many happy, healthy, productive years together.

### What to Expect

A good immunization program is essential to responsible horse ownership. Vaccination, however, does not guarantee 100% protection. In some situations, immunization may decrease the severity of disease but not prevent it completely. Two or more doses are usually needed to initiate an adequate immune response. Once the immunization procedure is completed, the protective antibodies in the blood stand guard against the invasion of specific diseases. Over time, however, these antibodies gradually decline. Therefore, a booster shot is needed at regular intervals.

#### Vaccinations Needed

The specific immunizations needed by a particular horse(s) depend upon several factors: environment, age, use, exposure risk, value, geographic location, and general management. Your veterinarian can help you determine the vaccination program best suited to your horse's individual needs. The following diseases are those most often vaccinated against.

**Tetanus (lockjaw):** is caused by toxin-producing bacteria present in the intestinal tract of many animals and found in abundance in the soil where horses live. The spores enter the body through wounds, lacerations, or the umbilicus of newborn foals. Although not contagious from horse to horse, tetanus poses a constant threat to horses and humans alike. Symptoms include muscle stiffness and rigidity, flared nostrils, hypersensitivity, and the legs stiffly held in a sawhorse stance. As the disease progresses, muscles in the jaw and face stiffen, preventing the animal from eating or drinking. More than 80 percent of affected horses die. All horse need immunized annually against tetanus. Your veterinarian may recommend additional boosters for mares and foals.

**Encephalomyelitis (Sleeping sickness and West Nile Virus):** Sleeping sickness is caused by the Western Equine Encephalomyelitis (WEE) virus or the Eastern version (EEE). WEE has been noted throughout North America, while EEE appears only in the east and southeast. WNV is also seen throughout the US. Mosquitoes most often transmit these diseases, after the insects have acquired the virus from infected birds and rodents. Symptoms vary widely, but all result from the degeneration of the brain. Early signs include fever, depression, muscle tremors and appetitive loss. Later, a horse might stagger when it walks, and paralysis develops in later stages leading to death. All horses need a WNV, EEE and WEE vaccine at least annually. Booster may be suggested depending on the weather, age and usage of your horse(s). The best time to vaccinate is spring, 30 days before the mosquitoes become active. Pregnant mares and foals may require additional vaccinations.

**Influenza (Flu):** This is one of the most common respiratory diseases in the horse. Highly contagious, the virus can be transmitted by aerosol from horse to horse by snorting or coughing. Symptoms are dry cough, nasal discharge, fever, depression, and loss of appetite. With proper

care, most horses recover in about 10 days. Some, however, may show symptoms for weeks, especially if put back to work too soon. The duration of protection by vaccination is short-lived and boosters may be recommended. Pregnant mares and foals may require additional vaccinations.

**Rhinopneumonitis (Equine Herpes Virus):** Two distinct viruses, EHV-1 and EHV-4, cause two different diseases, both of which are known as rhinopneumonitis (rhino). Both cause respiratory tract problems, and EHV-1 may also cause abortion, foal death, and paralysis. Infected horses may be feverish, lethargic, have a loss of appetite, nasal discharge and/or a cough. Rhinopneumonitis is spread by aerosol and by direct contact with secretions, utensils, or drinking water. Virus may be present but unapparent in carrier animals. Pregnant mares should be immunized during the 5<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup> months of gestation to aid in the prevention of abortion due to rhino. The duration of protection by vaccination is short-lived and boosters may be recommended.

#### Other Disease Threats:

**Strangles:** A highly contagious bacterial disease which results in lymph node swelling in the neck region. This swelling makes it had to swallow, thus the name "strangles". It is spread through direct contact with the bacteria containing secretions, tack and grooming utensils.

**Rabies:** A fatal viral disease. It is transmitted through saliva of infected animals. Rabies can be transmitted to humans.

**Botulism:** Known as "shaker foal syndrome" in young horses, this disease can be serious. Botulism in adult horses also can be fatal. Symptoms are neurologic, usually flaccid paralysis. Vaccines are not available for all types of botulism, but pregnant mares can be vaccinated in endemic areas.

**Equine viral arteritis (EVA):** A complicated disease, which can result in some breeding restrictions and export problems.

**Potomac Horse Fever:** A bacterial disease that results in a very high fever and diarrhea. PHF is usually isolated to swampy regions of the country. Horses eat a bacteria containing snail to catch PHF. One third of affected horses die from secondary complications.

**Equine Protozoal Myelitis:** EPM is a neurologic disease that causes muscle weakness, stumbling, and eventually paralysis resulting in death. EPM is passed thru Opossum feces. The available vaccine is conditionally licensed; safe but not proven to be effective.

#### To Summarize

For primary immunization, an initial vaccination is required, followed by a repeat dose in 3-4 weeks. After which boosters may be needed to help maintain protective antibody levels. Many combination vaccinations are available. Please discuss with your veterinarian, the best protocol for your horse(s). Appropriate vaccinations are the best and most cost-effective weapon you have against common infectious diseases of the horse. A program designed with the help and advice of your veterinarian will keep your horses and you happy and healthy for many years to come.