

## **Vaccinate to protect your horse**

### **Foals (newborn to <1 year old):**

The immune system is categorized into maternal (picked up by mare) and innate made by foal. The initial protection is acquired by the mare's first milk (colostrum). This is why it is essential the foal nurses within the first 12 hours of life. Vaccinations of the foal should start at 4-6 months of age when the foal will start making its own immunity. Once a vaccine is given for the first time it should be boosted in 3-4 weeks, so the body builds adequate immunity.

### **Adults (>1 year old):**

Most vaccines must be boosted once a year in the spring (March-April) before the mosquito season. The antibodies are lowest (lowest protection) right before you booster (once a year). Some antibodies, seen with West Nile, have been found to be low enough to be boosted in the fall (August-September) of the same year for protection. Tetanus should be boosted at time of penetrating injury or surgery if last dose not administered within 6 months. Most respiratory vaccines should be boosted every 3-6 months.

**Broodmares:** The mare should be vaccinated for newborn immunity 1-2 months before the foal is born, so the antibodies can be made in the colostrum. Vaccinate for Rabies prior to pregnancy. Herpes vaccine (EHV-1) should be administered 5, 7, and 9 months of pregnancy.

#### **\*Base Vaccines (All horses exposed):**

- Eastern and Western Equine Encephalomyelitis Viruses (Sleeping Sickness)
- West Nile
- Tetanus toxoid
- Rabies

#### **\*Respiratory Vaccines (Shows, Rides, Auctions, Large Stable Barns and Shipments):**

- Influenza
- Rhinopneumonitis (EHV-1 and EHV-4)
- Strangles

#### **Breeding Stallion exposed to EVA:**

- EVA vaccine if test negative

#### **Potomac Horse Fever:**

- Only in endemic areas: Great Lakes area and Eastern United States
- Recently: St. Louis, MO area

Reference: American Association of Equine Practitioners (AAEP)

[www.aaep.org](http://www.aaep.org)

Vaccination Guidelines (Foals and Adult Horses)

## Core Vaccines:

### Eastern/Western Equine Encephalomyelitis Virus

1. AKA: Kansas Plaque [Western] or Sleeping Sickness [Eastern]
2. Mosquito Vector
3. Causes neurological problems
4. Vaccinate Spring: Annually (killed vaccine)

### West Nile Virus

1. Found all over in USA-still in Kansas!!!
2. Mosquito Vector
3. Causes neurological problems
4. Vaccinate:
  - a. Inactivated vaccine (Innovator, Fort Dodge): annually (6 months if endemic area)
  - b. Recombinant conary pox vaccine (Recombex, Merial): annual (6 months if endemic area)
  - c. Flavivirus chimera vaccine-modified live vaccine (PreveNile, Intervet): annual only

### Tetanus (*Clostridium tetani*)

1. Found in dirt and normal guts
2. Horses more sensitive than people
3. Exotoxin (causes rigid neurologic signs)
4. Vaccinate Annually and if wound (within 6 months-killed vaccine)

### Rabies

1. Found in USA (Kansas=skunk virus strain)
2. Saliva from rabid animal (carnivore animals or insectivore bats)
3. 10 days from clinical neurologic signs the animal will die
4. 100% fatal- horses and humans
5. 100% preventable with vaccines
6. Vaccinate annually by veterinarian

## Risk Based-Vaccines

### Strangles (*Streptococcus equi*)

1. Contagious disease among horses
2. Nasal discharge and abscess drainage is infectious material for horses
3. Vaccinate
  - a. Killed vaccine contain M-protein (Intervet: Streptococcus Equine Bacterial Extract)- In the Muscle vaccine
  - b. Modified live vaccine (Fort Dodge: Pinnacle I.N.)- In the Nose vaccine----Bad abscess if in muscle!!
4. NOT used for putting out fires (outbreaks)
5. If previously exposed and M-protein titer >1,600 (Blood test)

- a. Purpera Hemorrhagica
- b. Myocitis

#### Influenza Virus

1. Contagious disease among horses
2. Fever, lethargy, serous nasal discharge and coughing
3. Vaccinate
  - a. Killed vaccine
  - b. Modified live vaccine (Intranasal)

#### Equine Herpes Virus 1 and 4

1. Contagious disease among horses
2. Upper respiratory, late term abortion, or neurologic signs
3. Vaccinate
  - a. Killed vaccine
    - i. Rhino: EHV ¼ (respiratory protection)
    - ii. Pneumobort K-1b (pregnant mares: 5, 7, 9 months of pregnancy)
4. No vaccine for neurologic form of EHV

#### Equine Viral Arteritis virus

1. Contagious disease among horses—few stallions are carriers
  - a. Risk: breeding, nose-nose contact
2. Stallions are carriers
3. Coughing, fever, abortion, and/or limb-scrotal-prepuccial swelling
4. Vaccinate
  - a. Modified Live vaccine—blood test first
    - i. Stallions
    - ii. Colts
    - iii. Mares-prior to breeding

#### Rotovirus

1. Fecal-oral transmission
2. Common cause of viral diarrhea in foals <2 months old
3. Vaccinate—brood mares
  - a. 8, 9, and 10 months of pregnancy

#### Patomac Horse Fever

1. From water source (regional: MI, IN, IL, OH, MO-St. Louis)
2. Vaccinate if going to region spring-fall