

UPDATE ON EQUINE VACCINATION PROGRAMS

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VACCINATION IS AN AID IN THE PREVENTION OF SPECIFIC INFECTIONS AND NOT A SUBSTITUTE FOR GOOD MANAGEMENT PRACTICES.

Important Characteristics of a Vaccine:

- Modified live or inactivated
- Relevant antigenic content
- Degree of antigenic purity
- Presence of adjuvant(s)
- Presence of one or more antigens singly or in combination

Properties of an Ideal Vaccine:

- Effective prevention of clinical signs
- Stimulation of satisfactory immune response
- Safe, with no adverse side-effects
- If a live vaccine, incapable of reversion to virulence
- Stable-remaining potent in transit and storage
- Economically priced

VACCINATION SCHEDULES

Disease	Primary Course	Booster
Botulism	3 doses, 1 month apart	Annual for broodmares within 1 month prior to foaling in endemic areas
Encephalitis	3 doses @ 4, 5, & 7 months of age	Annual for broodmares within 1 month of foaling - in endemic areas every 6 months
Equine viral arteritis	Mod live - 1 dose	Mares & stallions 3 weeks prior to breeding
Influenza	Mod live - 1 dose Inact - 2 doses 3 - 4 weeks apart	
Potomac horse fever	2 doses 3 - 4 weeks apart	Every 6 months Annual or every 3 - 6 months
Rabies	1 dose	Annual prior to seasonal incidence
Rhinopneumonitis (abortion) (respiratory form)	3 doses @ 5, 7, & 9 months gestation 2 doses 4 - 8 weeks apart	Annual
Rotavirus	3 doses @ 8, 9, 10 months of gestation	Same as primary course Annual or every 3 - 6 months
Strangles	Inact - 2 - 3 doses 2 - 4 weeks apart Mod live - same as for inact	Same as primary course
Tetanus toxoid	2 doses, 3 - 8 weeks apart	Single dose at 6 - 12 month intervals Annual or at time of injury/surgery

Botulism (Shaker Foal)

- Vaccine - *Clostridium botulinum*
Type B (toxoid) adjuvanted
- Administration - Intramuscular
- Primary Immunization - Adults: 3 doses at intervals of 4 weeks
Pregnant Mares: at 8, 9, & 10 months of gestation
- Booster - Annual, 1 dose for pregnant mares 2 - 4 weeks prior to foaling date

Equine Encephalitis **(Western - WEE; Eastern - EEE)**

- Vaccine - Inactivated, adjuvanted
- Administration - Intramuscular
- Primary Immunization - 3 doses at 4, 5, & 7 months of age
- Booster - Annual, 1 dose for pregnant mares 4 weeks prior to foaling date. In endemic areas, a booster every 6 months
- Notes - Vaccine available alone or in combination

Equine Encephalitis **(Venezuelan - VEE)**

- Vaccine - Inactivated, adjuvanted combined with EEE, WEE and tetanus toxoid
- Administration - Intramuscular
- Primary Immunization - As for EEE and WEE
- Booster - Annual or before onset of insect season

Equine Viral Arteritis

- Vaccine - Modified live (ARVAC)
- Administration - Intramuscular
- Primary Immunization - Stallions: 1 dose 3 weeks prior to breeding season
Mares: 1 dose 3 weeks prior to breeding. Pregnant mares should not be vaccinated during last 2 months of pregnancy.
Other Horses: 1 dose prior to exposure
- Booster - Annual

Influenza (Inactivated)

- Vaccine - Inactivated, adjuvanted equine influenza A subtype 1 and 2 antigens, to include American and Eurasian subtype 2 antigens.
- Administration - Intramuscular
- Primary Immunization - 2 doses 3 - 4 weeks apart
- Booster - Annually or every 3 - 6 months for horses at risk
- Notes - Vaccine available alone or in combination

Influenza (Modified Live)

- Vaccine - Cold adapted, subtype 2 American type strain (Flu Avert I.N)
- Administration - Intranasal
- Primary Immunization - 11 months of age or older
- Booster - Every 6 months

Potomac Horse Fever **(Ehrlichia risticii)**

Vaccine	-	Inactivated bacterin
Administration	-	Intramuscular
Primary Immunization	-	2 doses 3 - 4 weeks apart
Booster	-	Annual, 4 - 6 weeks prior to seasonal incidence
Notes	-	Vaccine available alone or in combination

Rabies

Vaccine	-	Inactivated
Administration	-	Intramuscular
Primary Immunization	-	1 dose
Booster	-	Annual

Equine Herpes Virus (EHV-1 and 4) Respiratory Form

Vaccine	-	Inactivated adjuvanted (EHV-1 and 4) Modified live (EHV-1)
Administration	-	Intramuscular
Primary Immunization	-	2 doses 4 - 8 weeks apart
Booster	-	Annually or at 3 - 6 month intervals
Notes	-	Vaccine available alone or in combination with influenza.

Equine Herpes Virus (EHV-1) Abortion

Vaccine	-	Inactivated adjuvanted (Prodigy , Pneumabort K [®] + 1b)
Administration	-	Intramuscular
Primary Immunization	-	<u>Pregnant Mares</u> : 3 doses at 5, 7, & 9 months of gestation
Booster	-	<u>Pregnant Mares</u> : Same as primary course

Rotavirus

- Vaccine - Inactivated, adjuvanted
- Administration - Intramuscular
- Primary Immunization - Pregnant Mares: 3 doses at 8, 9 & 10 months of gestation
- Booster - Pregnant Mares: Same as primary course

Strangles **(Streptococcus equi)**

- Vaccine - Inactivated, M protein cell wall extract, adjuvanted.
Modified live (Pinnacle , I.N.)
- Administration - Intramuscular (inactivated)
Intranasal (modified live)
- Primary Immunization - 2 or 3 doses at intervals of 2 - 4 weeks
- Booster - Single dose at 6 - 12 month intervals

Tetanus

- Vaccine - *Clostridium tetani*
(Toxoid) adjuvanted
- Administration - Intramuscular
- Primary Immunization - 2 doses 3 - 8 weeks apart
- Booster - Annual or at time of injury if more than 6 months since
previous vaccination
- Notes - Vaccine available alone or in combination