VACCINATIONS FOR FOALS

ALL VACCINATION PROGRAMS SHOULD BE DEVELOPED IN CONSULTATION WITH A LICENSED VETERINARIAN

The two categories below reflect differences in the foal's susceptibility to disease and ability to mount an appropriate immune response to vaccination based on the presence (or absence) of maternal antibodies derived from colostrum. The phenomenon of maternal antibody interference is discussed in the text portion of these guidelines.

CORE VACCINATIONS **protect against diseases that are endemic to a region, those with potential public health significance, required by law, virulent/highly infectious, and/or those posing a risk of severe disease. Core vaccines have clearly demonstrated efficacy and safety, and thus exhibit a high enough level of patient benefit and low enough level of risk to justify their use in all equids.**

	Foals and Weanlings (<12 months of age) *of mares vaccinated in the prepartum period against the disease indicated*	Foals and Weanlings (<12 months of age) *of unvaccinated mare or lacking vaccination history*	
DISEASE			COMMENTS
Tetanus	**3-dose series:** **1st** dose at 4 - 6 months of age **2nd** dose 4 - 6 weeks after the 1st dose **3rd** dose at 10 - 12 months of age	**3-dose series:** **1st** dose at 3 - 4 months of age **2nd** dose 4 - 6 weeks after the 1st dose **3rd** dose 10 - 12 months of age	
Eastern/Western Equine Encephalomyelitis (EEE/WEE)	**3-dose series:** **1st** dose at 4 - 6 months of age***** **2nd** dose 4 - 6 weeks after 1st dose **3rd** dose at 10 - 12 months of age, prior to the onset of the next vector season ****Foals in the Southeastern USA***: The primary vaccination series should be initiated with an additional dose at 2 - 3 months of age due to early seasonal vector presence.	**3-dose series:** **1st** dose at 3 - 4 months of age* **2nd** dose 4 weeks after 1st dose **3rd** dose, 8 week interval after 2nd dose ****Foals in the Southeastern USA***: The primary vaccination series should be initiated at 3 months of age due to early seasonal vector presence.	*Note:* Primary vaccination series scheduling may be amended with vaccinations administered earlier to younger foals that are at increased disease risk due to the presence of vectors. A foal born during the vector season may warrant beginning vaccination at an earlier age than a foal born prior to the vector season.

Rabies	**2-dose series:** **1st** dose at 6 months of age **2nd** dose 4 - 6 weeks after 1st dose	**1 dose** Annual revaccination	
West Nile Virus (WNV)	*Inactivated whole virus vaccine* **3-dose series:** **1st** dose at 4 - 6 months of age **2nd** dose 4 - 6 weeks after 1st dose **3rd** dose at 10 - 12 months of age, prior to the onset of the next vector season *Recombinant canary pox vaccine* **3-dose series:** **1st** dose at 4 - 6 months of age **2nd** dose 4 weeks after 1st dose **3rd** dose at 10-12 months of age, prior to the onset of the next vector season *Inactivated flavivirus chimera vaccine* **3-dose series:** **1st** dose at 4 - 6 months of age **2nd** dose 4 - 6 weeks after 1st dose **3rd** dose at 10 - 12 months of age, prior to the onset of the next vector season ***Foals in the Southeastern USA***: Due to early seasonal vector presence, the primary vaccination series should be initiated earlier with the addition of a dose at 3 months of age.	*Inactivated whole virus vaccine* **3-dose series:** **1st** dose at 3 - 4 months of age **2nd** dose, 4 weeks after 1st dose **3rd** dose, 8 week interval after 2nd dose *Recombinant canary pox vaccine* **3-dose series:** **1st** dose at 3 - 4 months of age **2nd** dose, 4 weeks after 1st dose **3rd** dose, 8 week interval after 2nd dose *Inactivated flavivirus chimera vaccine* **3-dose series:** **1st** dose at 3 - 4 months of age **2nd** dose, 4 weeks after 1st dose **3rd** dose, 8 week interval after 2nd dose (If primary series initiated during mosquito vector season, an interval of 3-4 weeks between the 2nd and 3rd doses is preferable to the above described 8 week interval.) ***Foals in the Southeastern USA***: Due to early seasonal vector presence, the primary vaccination series should be initiated at 3 months of age.	*Note:* Primary vaccination series scheduling may be amended with vaccinations administered to younger foals that are at increased risk of exposure due to the presence of vectors. A foal born during the vector season may warrant initiation of the primary vaccination series at an earlier age than a foal born prior to the vector season. Data indicates that maternal antibodies do not interfere with the originally licensed inactivated whole virus vaccine product; however, protection from clinical disease has not been provocatively tested in foals less than 6 months of age with any of the currently licensed West Nile Virus products.

<u>RISK-BASED VACCINATIONS</u> are those having applications which may vary between individuals, populations, and geographic regions. Risk assessment should be performed by, or in consultation with, a licensed veterinarian to identify which vaccines are appropriate for a given horse or population of horses. The listing of a vaccine here is not a recommendation for its inclusion into a vaccination program. Vaccine scheduling is provided for use after it has been determined which, if any, risk-based vaccines are indicated. Note: vaccines are listed in this table in alphabetical order not in order of priority for use.

DISEASE	Foals and Weanlings (<12 months of age) *of mares vaccinated in the prepartum period against the disease indicated*	Foals and Weanlings (<12 months of age) *of unvaccinated mares*	COMMENTS
Anthrax	Not applicable. As it is not recommended to vaccinate mares during pregnancy there will be no foals of mares vaccinated prepartum	No age specific guidelines are available for this vaccine. Manufacturer's recommendation is for primary series of 2 doses administered subcutaneously at a 2 - 3 week interval.	Antimicrobial drugs must **<u>not</u>** be given concurrently with this vaccine. Caution should be used during storage, handling and administration of this live bacterial product**.** Consult a physician immediately should accidental human exposure (via mucus membranes, conjunctiva or broken skin) occur.
Botulism	**3-dose series:** **1st** dose 2 - 3 months of age **2nd** dose 4 weeks after 1st dose **3rd** dose 4 weeks after 2nd dose	**3-dose series:** **1st** dose 1 - 3 months of age **2nd** dose 4 weeks after 1st dose **3rd** dose 4 weeks after 2nd dose	Maternal antibody does not interfere with vaccination; foals at high risk may be vaccinated as early as 2 weeks of age.
Equine Herpesvirus (EHV)	*<u>Inactivated or modified live vaccine</u>* **3-dose series:** **1st** dose 4 - 6 months of age **2nd** dose 4 - 6 weeks after 1st dose **3rd** dose at 10 - 12 months of age Revaccinate at 6-month intervals	*<u>Inactivated or modified live vaccine</u>* **3-dose series:** **1st** dose at 4 - 6 months of age **2nd** dose 4 - 6 weeks after 1st dose **3rd** dose at 10 - 12 months of age Revaccinate at 6-month intervals	

Equine Viral Arteritis (EVA)	**Colt (male) foals:** Single dose at 6 - 12 months of age (see comments)	**Colt (male) foals:** Single dose at 6 - 12 months of age (see comments)	**Prior to initial vaccination, colt (male) foals should undergo serologic testing** and be confirmed negative for antibodies to EAV. Testing should be performed shortly prior to, or preferably at, the time of vaccination. As foals can carry colostral derived antibodies to EAV for up to 6 months, testing and vaccination should **not** be performed prior to 6 months of age.
Equine Influenza	*Inactivated vaccine* **3-dose series:** **1st** dose at 6 months of age **2nd** dose 3 - 4 weeks after 1st dose **3rd** dose at 10 - 12 months of age *Modified live vaccine* **2-dose series administered intranasally:** **1st** dose at 6 - 7 months of age **2nd** dose at 11 - 12 months of age *Canary pox vector vaccine* **2 dose series:** **1st** dose at 6 months of age **2nd** dose 5 weeks after 1st dose Revaccinate at 6-month intervals	*Inactivated vaccine* **3-dose series:** **1st** dose at 6 months of age **2nd** dose 3 - 4 weeks after 1st dose **3rd** dose at 10 - 12 months of age *Modified live vaccine* **2-dose series administered intranasally:** **1st** dose at 6 - 7 months of age **2nd** dose at 11 - 12 months of age *Canary pox vector vaccine* **2 dose series:** **1st** dose at 6 months of age **2nd** dose 5 weeks after 1st dose Revaccinate at 6-month intervals	An increased risk of disease may warrant vaccination of younger foals. Because some maternal anti-influenza antibody is likely to be present, a complete series of primary vaccinations should still be given after 6 months of age.
Leptospirosis	**2 dose series:** **1st** dose at 6 months of age **2nd** dose 3-4 weeks after 1st dose Annual revaccination	**2 dose series:** **1st** dose at 6 months of age **2nd** dose 3-4 weeks after 1st dose Annual revaccination	Safety has been demonstrated in foals 3 months of age. The effects of circulating maternal antibody and vaccination have not been determined.
Potomac Horse Fever (PHF)	**2-dose series:** **1st** dose at 5 months of age **2nd** dose 3 - 4 weeks after 1st dose	**2-dose series:** **1st** dose at 5 months of age **2nd** dose 3 - 4 weeks after 1st dose	If risk warrants, vaccine may be administered to younger foals. Subsequent doses are to be administered at 4-week intervals until 6 months of age.
Snake Bite	Please see guidelines for additional information	Please see guidelines for additional information	

Strangles ***Streptococcus equi***	*Killed vaccine* **3-dose series:** **1st** dose at 4 - 6 months of age **2nd** dose 4 - 6 weeks after 1st dose **3rd** dose 4 - 6 weeks after 2nd dose *Modified live vaccine* **3-dose series administered intranasally:** **1st** dose at 6 - 9 months of age **2nd** dose 3 - 4 weeks after 1st dose **3rd** dose at 11 - 12 months of age	*Killed vaccine* **3-dose series:** **1st** dose at 4 - 6 months of age **2nd** dose 4 - 6 weeks after 1st dose **3rd** dose 4 - 6 weeks after 2nd dose *Modified live vaccine* **3-dose series administered intranasally:** **1st** dose at 6 - 9 months of age **2nd** dose 3 - 4 weeks after 1st dose **3rd** dose at 11 - 12 months of age	Vaccination is **not** recommended as a strategy in outbreak mitigation. If risk warrants, the modified live vaccine (MLV) may be safely administered to foals as young as 6 weeks of age. However, vaccine efficacy in this age group has not been adequately studied. If MLV is administered to younger foals, a 3rd dose of vaccine should then be administered 2 – 4 weeks prior to weaning. The risk of vaccine-associated adverse events is increased when the MLV product is administered to young foals.

Vaccinations for Foals developed by the American Association of Equine Practitioners Infectious Disease Committee, 2008 and updated by the AAEP Biological & Therapeutic Agents Committee, 2012 and again updated by an AAEP Vaccination Guidelines Review Task Force in 2015.