

**TABLE 1. Vaccination Guidelines for Horses in the North America\*** (W. David Wilson, UC Davis, 3/1/07)

Disease/vaccine	Foals/weanlings	Yearlings	Performance Horses	Pleasure Horses	Broodmares <sup>†</sup>	Comments
<p><b>Tetanus (inactivated toxoid)</b></p> <p><i>Core vaccine for all horses</i></p>	<p><b>Foal of vaccinated mare:</b> First dose: 6 months Second dose: 7 months Third dose**: 9 to 10 months</p> <p><b>Foal of non-vaccinated mare:</b> First dose: 3 to 4 months Second dose: 4 to 5 months Third dose**: 6 to 8 months</p>	Annual	Annual	Annual	Annual, 4 to 8 weeks before foaling	Booster at time of a penetrating injury or surgery if last dose of tetanus toxoid was not administered within the past 6 months.
<p><b>Encephalomyelitis (EEE, WEE inactivated vaccine)</b></p> <p><i>Core vaccine for all horses</i></p>	<p><b>WEE, EEE (in low-risk areas):</b> <b>Foal of vaccinated mare:</b> First dose: 6 months Second dose: 7 months Third dose**: 9 to 10 months</p> <p><b>Foal of non-vaccinated mare:</b> First dose: 3 to 4 months Second dose: 4 to 5 months Third dose**: 6 to 8 months</p> <p><b>EEE: (in high-risk areas)</b> First dose: 3 to 4 months Second dose: 4 to 5 months Third dose**: 6 to 8 months</p>	Annual, spring	Annual, spring	Annual, spring	Annual, 4 to 8 weeks before foaling	For VEE, follow same protocol as for WEE/EEE if indicated by threat of exposure or requirements for interstate or international transportation. VEE may be available only as a combination vaccine with EEE and WEE.
<p><b>West Nile Virus (Inactivated or canarypox vectored recombinant vaccine)</b></p> <p><i>Core vaccine for all horses</i></p>	<p><b>Foal of vaccinated mare:</b> First dose: 3 to 4 months Second dose: 4 to 5 months Third dose**: 6 to 8 months</p> <p><b>Foal of non-vaccinated, non-exposed mare:</b> First dose: 3 months or less Second dose: 1 month later</p> <p>For the inactivated vaccine, administration of a third dose, 2 to 3 months after the 2<sup>nd</sup>, is recommended.</p>	Semiannual (twice annually) or Annual depending on regional duration of season for challenge by WNV-infected mosquitoes.	Semiannual or Annual depending on regional duration of season for challenge by WNV-infected mosquitoes.	Semiannual or Annual depending on regional duration of season for challenge by WNV-infected mosquitoes.	Semiannual or Annual; time one booster 4 to 8 weeks before foaling. Avoid administration to mares during the first 60 days of gestation if possible.	Peak seasonal exposure to WNV is in summer and fall. In areas with a prolonged season for WNV-infected mosquitoes, time one booster in early spring to precede local mosquito activity and a second booster in mid- to late-summer to precede expected peak local incidence of disease. Mosquito control is important for effective WNV prevention in both horses and humans. Maternal antibodies minimally affect the response of foals to either the inactivated or canarypox recombinant live WNV vaccine; therefore, vaccination can commence at a younger age than is recommended for many other injectable vaccines.



Disease/vaccine	Foals/weanlings	Yearlings	Performance Horses	Pleasure Horses	Broodmares <sup>†</sup>	Comments
<b>Rabies (inactivated vaccine)</b> <i>Add to core when significant risk of exposure to wildlife vectors of rabies exists</i>	<b>Foals of vaccinated mares:</b> First dose: 6 months Second dose: 7 months Third dose: 12 months  <b>Foals of nonvaccinated mares:</b> First dose: 3 to 4 months Second dose: 12 months	Annual	Annual	Annual	Annual, before breeding	Vaccination is recommended in endemic areas where potential exists for contact with wildlife vectors such as skunks, raccoons, foxes, badgers, and bats.
<b>Potomac Horse Fever (inactivated vaccine)</b> <i>Special circumstances only in endemic areas</i>	First dose: 5 to 6 months Second dose: 6 to 7 months A 3 <sup>rd</sup> dose in the primary series should be given if the first dose was given before 5 months.	4 to 6 month interval	4 to 6 month interval	4 to 6 month interval	4 to 6 month interval with one dose 4 to 6 weeks before foaling	Efficacy of vaccination protocols for prevention of Potomac Horse Fever is questionable. Booster during May to June in endemic areas if elected.
<b>Botulism (Shaker Foal; inactivated type B toxoid)</b> <i>Special circumstances only in endemic areas to protect foals</i>	<b>Foal of vaccinated mare:</b> 3-dose series at 30-day intervals is best delayed until foals are 6 months old but can be started as early as 2 months of age	Not applicable	Not applicable	Not applicable	Initial 3-dose series at 30-day intervals with the last dose 4 to 6 weeks before foaling. Annually thereafter, 4 to 6 weeks before foaling	Only in endemic areas on breeding farms on which risk of infection is high. Protection of the foal is best accomplished by vaccinating the mare. Vaccination of young foals from non-vaccinated mares is commonly practiced but may not protect them during the first few months of life when they are most susceptible.
<b>Equine Viral Arteritis (modified live vaccine)</b> <i>Special circumstances only</i>	Intact colts intended for future use as breeding stallions: One dose at 6 to 12 months of age	Annual for colts intended for use as breeding stallions	Annual for colts intended for use as breeding stallions	Annual for colts intended for use as breeding stallions	Annual for seronegative, open mares before breeding to carrier stallions; isolate mares for 21 days after breeding to carrier stallion	Use only under special circumstances. Annual for breeding stallions and teasers, 28 days before start of breeding season. Vaccinated mares do not develop clinical signs after breeding to carrier stallions even though they become transiently infected and may shed virus for a short time. Vaccination will render horses seropositive and may complicate exportation.
<b>Rotavirus A (inactivated vaccine)</b> <i>Special circumstances only on breeding farms</i>	Little value to vaccinate foal because there is insufficient time to develop antibodies to protect during susceptible age	Not applicable	Not applicable	Not applicable	Vaccinate mares at 8, 9, and 10 months of gestation, each pregnancy. Passive transfer of colostral antibodies aid in prevention of rotaviral diarrhea in foals.	Use on endemic farms or when risk of infection is high. Check concentrations of immunoglobulins at 24 hours of age to verify adequate passive transfer.

\*Appropriate application of these guidelines depends on specific assessment of risk on your particular premises by your veterinarian. As with the administration of all medications, the label and product insert should be read before administration of all vaccines. \*\* When a third dose is recommended in the primary immunization series, this should be administered 8 to 12 weeks after the second dose.

†Schedules for stallions should be consistent with the vaccination program of the adult horse population on the farm and modified according to risk.