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Vaccination recommendations

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Recent investigation of how foals respond to vaccines has prompted new strategies for vaccination. It has been found that maternal antibodies can block the foals' immune response for 4-9 months. Vaccination before this time can be ineffective, or worse yet, cause a lack of response to future vaccinations. The introduction of very effective intranasal vaccines for influenza and strangles has also caused some changes in adult horse vaccination protocol. The emergence of West Nile Virus to our area has added a new vaccine to the protocol. Vaccines for EPM and Potomac Horse Fever exist but their efficacy is questionable at this time. Quick reference tables of vaccine recommendations for all age groups are available at the hospital.

Influenza

All horses on breeding farms and in training barns should be regularly vaccinated for influenza. Horses aged 2 years and younger are particularly susceptible to this virus. However, maternal antibodies seem to interfere with vaccination for longer than many other disease antibodies; therefore, the first vaccination is delayed. The intranasal vaccine has been shown to give superior protection when compared with the intramuscular vaccines. No other modified live vaccination should be given within 10 days of the intranasal vaccine. Use either the intranasal vaccine or intramuscular vaccine for influenza.

Intranasal vaccine recommendations (FluAvert I.N.®):

1. The vaccine is not labeled for use in horses less than 11 months of age. However, a foal's immunity may wane earlier. Therefore, an off-label dose at 7 to 9 months can be given and then repeated again at 10 or 11 months of age. After this series, boosters should be given every 6 months.
2. Adult horses only need 1 dose every 6 months.
3. The vaccine is not labeled for pregnant mares, consult your veterinarian to see if indicated. Pregnant mares should be boosted 4-6 weeks prior to foaling to ensure high colostral antibodies.

Intramuscular vaccine recommendations :

1. Maintain adult horses (> 2 years of age) on a program of booster vaccinations at 4-6 month intervals.

2. Booster vaccinate mares 4-6 weeks prior to foaling.
3. Begin foal vaccination at 9 months of age using 3 or more doses in the primary series given every 30 to 60 days.
4. Booster young horses at 3-4 months intervals until they are older than 2 years of age.

Eastern Equine Encephalitis (EEE) and Western Equine Encephalitis (WEE)
(Also known as sleeping sickness.)

1. Any horses coming on to a farm with an unknown vaccination history should receive this vaccine immediately (especially horses coming from out of state).
2. Boosters should be given in late winter / early spring and repeated 6 months later (early fall).
3. Pregnant mares should also be vaccinated 4-6 weeks prior to foaling.
4. Foals should be vaccinated beginning at 4 months of age and given 3 or more doses in the primary series, then every 6 months.

West Nile Virus

This is a newly licensed vaccine for a new disease with on-going research. These are preliminary recommendations:

1. Any horses arriving on a farm with an unknown vaccination history (or horses that have never received the vaccine) should be vaccinated immediately and given a booster in 2 to 6 weeks (especially horses coming from out of state). Thereafter, boosters should be given every 3-4 months.
2. Pregnant mares should also be vaccinated 4-6 weeks prior to foaling.
3. Foals should be vaccinated beginning at 4 months of age and given 3 or more doses in the primary series, then every 4 to 6 months.

Tetanus

1. Any horse that sustains a wound should be given a booster unless vaccinated for tetanus in the last 30-60 days.
2. Vaccinate pregnant mares 4-6 weeks prior to foaling.
3. Begin foal vaccination at 4-6 months. Administer at least 3 doses in the primary series given every 30 to 60 days, then annually.
4. Booster vaccinate adult horses annually.

Rhinopneumonitis [Equine Herpes Virus – 1 (EHV-1) and Equine Herpes Virus – 4 (EHV-4)]

EHV-1 can cause abortion, a neurologic disorder, and/or respiratory disease.

EHV-4 causes respiratory disease. All horses on breeding farms or in training barns should be regularly vaccinated for rhinopneumonitis.

1. EHV-1 vaccine (Pneumabort K + 1b®) should be given during the 5th, 7th, and 9th month of pregnancy to prevent the abortion form of the disease.
2. Vaccinate dam 4-6 weeks prior to foaling with a killed EHV 1/4 vaccine.
3. Start foal vaccination at 4-6 months of age with 2 doses one month apart followed by 3rd booster 2 months later; then booster every 3 to 4 months until > 2 years of age.

4. Adult horses should be vaccinated every 4 to 6 months, young horses in training may benefit from boosters every 3 to 4 months.

Rotavirus

Only indicated if dam and/or foal will be in an endemic area. Consult your veterinarian.

Dam is vaccinated during 8th, 9th and 10th month of gestation. Repeat each pregnancy.

Botulism

Only indicated if foal will be in endemic area. Consult your veterinarian.

Vaccinate dam during the 8th, 9th, and 10th month of gestation. Vaccinate 4-6 weeks before foaling in subsequent pregnancies.

Rabies

1. Yearly vaccination of adult horses is recommended in our area.
2. Vaccinate mare 4-6 weeks prior to foaling (off-label) OR vaccinate mare before breeding.
3. Begin foal vaccination at 6 months or older using 2 doses in the primary series given 30 to 60 days apart; booster as yearlings and then continue on an annual basis.

Strangles (Streptococcus Equi)

Strangles vaccination is only indicated for horses likely to have exposure to the disease, such as being introduced to a farm where the disease is endemic. An intranasal vaccine is now available and is recommended; it has been shown to be 70 – 80% effective. When used, no other vaccines should be given within 10 days. Alternatively, the M-protein intramuscular vaccine is used; it has been shown to be 60 – 70% effective. If a horse has actually had the disease, vaccination is not recommended for at least 1 year or until a blood test has shown that the natural immunity has waned. This precaution is suggested to avoid a rare but serious immune-mediated vasculitis.

Intranasal vaccine recommendations (Pinnacle I.N.®):

1. Horses that have never received it: start with a 2 dose primary series followed by yearly boosters.
2. Begin the intranasal vaccine in foals at 4 to 5 months with the initial 2 doses followed by a booster 6 months later and yearly thereafter.
3. Mare should be vaccinated 4-6 weeks prior to foaling (use of intranasal vaccine is off-label but shown to be safe). Alternatively, give a dose of the M-protein vaccine (StrepGuard®) intramuscularly.

Intramuscular vaccine recommendations:

1. Adults are vaccinated every 12 months; Consult your veterinarian for recommendations.
2. Begin the intramuscular vaccine at 4 months followed by a booster 1 month and 6 months later and yearly thereafter.

Potamac Horse Fever (PHF)

Use is only indicated for horses that will be in endemic areas. Consult your veterinarian for recommendations.

This vaccine's efficacy is questionable due to the many strains of PHF being discovered.

1. Booster dam 4-6 weeks prior to foaling.
2. Begin foal vaccination at 3 to 5 months of age using a 3 dose primary series.
3. Booster vaccinate at 4 to 6 month intervals thereafter.