

## **FOALING FUNDAMENTALS: The Top 10 List**

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- 1. Gestation Length** of horses is approximately 340 to 345 days. The length of pregnancy is about 7 to 10 days longer for mares foaling out in the winter than for mares foaling out in the late Spring or Summer. Mares maintained under lights during the last few months of pregnancy will have a shorter length of gestation. One should factor in season and light exposure when calculating expected foaling dates. Pregnant mares should be vaccinated one month prior to the due date to increase antibody levels in the colostrum. Type of vaccine administered may depend on geographical location, potential exposure and management practices. If the mare has had a Caslick procedure performed, the sutured vulva should be opened approximately 2 weeks prior to the expected foaling date or earlier if needed.
- 2. Milk Calcium** levels increase as the time of foaling approaches. Most mares foal within 48 hours of when milk calcium levels reach 200 ppm. Several commercial test kits are available to help predict when foaling will (or will not) occur.
- 3. Waxing of the Teats** is a sign that foaling will occur in most mares within 24 to 48 hours. However, not all mares wax up and the duration from the onset of waxing to foaling can be quite variable.
- 4. Stage 1 of Labor** lasts for 1 to 4 hours. Signs of early labor in the mare include frequent episodes of lying down, looking at her flanks, pawing at the ground and patchy sweating. The end of Stage 1 occurs when the mare 'breaks her water' or ruptures the outer placental membrane (chorioallantois) and releases allantoic fluid.
- 5. Stage 2 of Labor** or active labor lasts 20 to 30 minutes. The first structure visible at the vulva should be the amnion, a translucent gray membrane. The hallmark of premature separation of the placenta ('red bag') is the appearance of a thick, brick-red, velvety membrane (the chorion) at the vulva during early labor. Red bag should be considered a medical emergency as the oxygen supply to the foal is compromised and veterinary help should be summoned immediately.
- 6. Establishment of an Airway and Stimulation of Breathing** is the top priority when a foal has just been

born. The amnion should be removed from the nasal area if it did not break spontaneously during foaling. Respiration may be stimulated by briskly rubbing the newborn foal with a towel, tickling the inside of the nostrils with straw or flexion and extension of the front limbs to stimulate stretch receptors.

7. **Dip the Navel** with a disinfectant soon after foaling to help prevent bacterial infections and help seal the umbilical stump. Common disinfectants include dilute Nolvasan<sup>®</sup>, Betadine<sup>®</sup> and Iodine. It is recommended that the navel be dipped 2 to 3 times per day for the first 2 to 3 days after birth.

8. **Standing and Nursing** by the foal should occur within approximately 1 hour and 2 hours, respectively, after birth. Ingestion of colostrum, which is rich in antibodies, is critical for early immune protection of the foal. Ideally, a liter or more of good quality colostrum should be ingested by the foal within the first 6 to 12 hours of life. Antibody levels in the blood of the foal may be checked 24 to 36 hours after birth to determine if adequate transfer of colostral antibodies has occurred. However, if blood antibody levels are checked earlier (i.e. at 12 hours), oral supplementation with frozen-thawed colostrum or a colostrum substitute can be administered if needed.

9. **Passage of the Placenta** (Stage 3 of labor) should occur within 3 hours after foaling. Failure to pass the placenta could lead to severe medical conditions in the mare, such as peritonitis and laminitis (founder). Early medical intervention can aid in stimulating passage of the placenta and prevention of subsequent complications.

**Meconium or first feces should pass within approximately 3 hours after birth. An enema should be administered if a foal strains to defecate without passing meconium. Commercial phosphate-based enemas (i.e. Fleet<sup>®</sup>) are safe, effective and convenient.**



**Waxing of teat ends in a parturient mare**