

PREPARING FOR A SAFE AND SUCCESSFUL FOAL DELIVERY

Written by the AAEP

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CARING FOR THE FOALING MARE AND NEWBORN

If your mare has made it through 11 months of pregnancy, you're almost home free. Labor and delivery, while momentous, are generally uncomplicated. Every effort should be made to present during foaling. In most cases, you will simply need to be a quiet observer. Mares seem to prefer to foal at night in privacy, and apparently have some control over their delivery. Hiring a foaling attendant, installing a video monitor or using a birth alarm system can save the life of the foal if a problem should arise. It is advisable to have your veterinarian's telephone number nearby in case of an emergency.

A SAFE PLACE TO FOAL

What your mare will need, however, is a clean, safe, quiet place to foal. Horses have been giving birth on the open range for eons, and this is still an acceptable choice. Allowing the mare to foal in the pasture even has some advantages. An open grassy area is likely to be cleaner than a stall and provides a healthy environment with adequate room to foal. You won't have to worry about the mare crowding into a corner or foaling too close to a wall. However, many owners prefer to confine the mare to observe her progress.

Should you choose to foal your mare in a stall, provide one that is a minimum of 14' x 14'. If possible, the stall should have adequate bedding and a floor that can be readily cleaned and disinfected. Dirt or clay floors make sanitation more difficult. Straw (particularly wheat straw) is preferable to shavings, as it won't cling to the wet newborn or mare the way small wood particles can. Remove manure and soiled bedding promptly and disinfect the stall between deliveries.

THE COUNTDOWN

Mares provide clues that they will soon give birth. However, the timetable is far from absolute. Some mares may show all the signs like clockwork, others show practically none. The following is a general guideline, but be prepared for surprises:

- The mare's udder begins filling with milk 2-4 weeks prior to foaling.
- The muscles of the vulva and croup relax. The tailhead may become more prominent a few days prior to foaling.
- The teats become engorged 4-6 days prior to foaling.
- "Waxing" of the teats occurs (a yellowish, honey-like secretion [colostrum] appears 1-4 days prior to foaling).
- The mare becomes anxious and restless. She may appear to be colicky. She may kick at her belly, pace, lie down and get up, look or bite at her flanks and sweat. She may frequently raise her tail and urinate. Generally, this is the first stage of labor (however, be aware that colic remains a possibility; if such behavior is prolonged for more than an hour or two without progress towards foaling, contact your veterinarian).

PREPARING FOR BIRTH

Most mares foal without difficulty. It usually is best to allow the mare to foal undisturbed and unassisted. If a problem becomes apparent, contact your veterinarian immediately.

What you can do:

- Write down your veterinarian's phone number well in advance of the birth and keep it by all phones.
- Keep a watch or clock on hand so you can time each stage of labor. When you're worried or anxious, your perception of time becomes distorted. The watch will help you keep accurate track of the mare's progress during labor. Take written notes so that you won't have to rely on memory alone.
- Wrap the mare's tail with a clean wrap when you observe the first stage of labor. Be sure that the wrap is not applied too tightly or left on too long as it can cut off circulation and permanently damage the tail.
- Wash the mare's udder, vulva and hindquarters with a mild soap and rinse thoroughly.
- Clean and disinfect the stall as thoroughly as possible. Provide adequate bedding.
- Test strips that measure calcium in mammary secretions are available commercially. These strips aid the owner in predicting when the mare will foal because sudden increases in calcium are associated with imminent foaling.

UNDERSTANDING LABOR & DELIVERY

Labor is divided into three stages:

Stage one begins with the onset of contractions and generally lasts 1-2 hours. Even in a normal delivery, the mare may stand up, lie down and roll several times in an effort to properly position the foal for delivery. During this phase, contractions move the foal through the cervix and into position in the birth canal. The fetal membranes (allantois) may become visible at the mare's vulva. When the sac breaks, signaled by a rush of fluid, stage one ends. The rupture of the allantoic membrane and rush of placental fluids may be confused with urination.

Stage two is the actual expulsion of the foal. This phase moves relatively quickly. If it takes more than 30 minutes for the mare to deliver, there is most likely a problem. If there is no significant progress within 10-15 minutes after the membranes rupture, call your veterinarian immediately. If labor seems to be progressing, wait and watch. Normal presentation of the foal resembles a diving position, with front feet first, one slightly ahead of the other, hooves down, followed closely by the nose, head, neck, shoulders and hindquarters. If you notice hoof soles up, the foal may be backwards or upside down, and you should call your veterinarian immediately. If you suspect any deviation from the normal delivery position, call your equine practitioner. The most deadly of foaling emergencies is a premature rupture of the chorioallantois, known as "Red Bag Delivery." If at any time during stage 2 you see red/maroon membranes covering the foal as it emerges from the vagina, the placenta must be rapidly torn open. The foal is detached from its blood and oxygen supply. Normal membranes that cover the foal are white or yellow and translucent.

Stage three labor begins after delivery and is the phase during which the afterbirth (placenta) is expelled. Most placentas are passed within 1-3 hours after the foal is delivered. If the placenta has not passed within 3 hours, call your veterinarian. A retained placenta can cause serious problems, including massive infection and laminitis.

POSTPARTUM CARE FOR MARE AND FOAL

In the excitement of birth, it is important to remember some tried and true guidelines:

- Allow the foal time to break the fetal membranes (see “Red Bag Delivery” exception above). Once the foal breaks through, be sure it is breathing.
- Generally, it is not recommended to cut or break the umbilical cord. If it has not broken during delivery, it will usually break when the mare or foal gets up. The cord should break at a site approximately one inch from the foal's abdomen, where the cord's diameter is slightly narrower than the remainder of the cord. If it is necessary to manually separate the cord, it should be held firmly on either side of the intended break site, then twisted and pulled to separate (never cut the cord). Twisting and pulling of the cord stimulate closure of the umbilical vessels and reduce the likelihood of hemorrhage from the cord stump. If bleeding persists following cord separation, pressure can be applied to the stump for several minutes by squeezing with a thumb and finger. It is NOT advisable to suture or permanently clamp an umbilical stump. Foals will not typically lose enough blood to become anemic and there is significant danger of trapping pathogens in the umbilical stump when you suture it closed.
- Encourage the mare and foal to rest as long as possible. Give them an opportunity to bond undisturbed.
- Treat the umbilical cord with an antiseptic solution, recommended by your veterinarian, soon after the cord breaks and for several days thereafter to prevent bacterial infection. Diluted (1:4) chlorhexadine solutions are preferred over strong iodine for naval dipping. Tincture of iodine can burn the skin surrounding the umbilical stump and should be avoided.
- Observe the mare and foal closely for the next 24 hours.

IMPORTANCE OF OBSERVATION

Following birth of the foal, the mare and foal should be monitored for the following:

- Foal is breathing normally.
- Foal is bright and alert to its new surroundings. The foal should make attempts to rise within 30 minutes following its birth.
- Mare is non-aggressive, curious and accepting of her newborn. Occasionally a mare will reject her foal. In such a case, the foal should be removed and reintroduced with the mare under restraint. Foal rejection is more common in maiden mares.
- Foal should stand and nurse within 2 hours of birth. If the foal has not nursed within 3 hours, call your veterinarian. The foal may be weak and in need of assistance or medical attention.
- Foal should pass meconium (the first sticky, dark stool) within 12 hours after birth. If not, an enema may be needed. Female foals do not urinate until about 11 hours after birth; male foals may take 6 hours to urinate after foaling.
- Mare should be bright and alert. Allow her to eat as soon as she is ready and supply plenty of clean, fresh water.
- Once the placenta has been expelled, examine it to make sure it is intact, particularly at the tips of the horns. The afterbirth will be Y-shaped and should have only the hole through which the foal emerged.

- If you suspect the mare has retained part of the placenta, call your veterinarian. Be sure to save the placenta for your veterinarian to examine.
- You may wish to check the mare's temperature and other vital signs periodically within the first 24 hours to make sure they are normal. An elevated temperature may indicate infection (normal range is 99.5-101.5 F).

IMPORTANCE OF COLOSTRUM

It is essential that the foal receive an adequate supply of colostrum. Colostrum, the mare's first milk, is extremely rich in antibodies. It provides the foal with passive immunity to help prevent disease until its own immune system kicks in.

A foal must receive colostrum within the first 8-12 hours of life in order to absorb the antibodies. If a foal is too weak to nurse, it may be necessary to milk the mare and give the colostrum to the foal via a stomach tube.

If a mare appears to be leaking an excessive amount of milk prior to birth, consult your veterinarian. This pre-foaling milk is not typically colostrum-rich. However, depending on your veterinarian's recommendation, the mare may be milked and the colostrum frozen to give to the foal shortly after birth. For orphan foals, or mares without an adequate supply of colostrum, it is important to locate a back-up supply. Without it, the foal is at an increased risk of infections. Your veterinarian can test the colostrum to determine whether it is rich in antibodies. Also, the foal's serum can be tested at 18-24 hours of age to evaluate IgG antibody levels. The majority of absorption (85%) takes place within the first 6-8 hours. The foal can be tested when it is 8 hours old and if IgG is deficient, it can be supplemented. If you wait until the foal is 24 hours old to evaluate IgG absorption and it proves to be inadequate, your only option will be a plasma transfusion. If IgG is inadequate, treatment for Failure of Passive Transfer (FPT) should be instituted by your veterinarian.

OTHER FOALING CAVEATS

- If a mare appears to require assistance during foaling, call your veterinarian.
- If you suspect a problem during the foaling process (such as a foal which is not in the normal birth position), call your veterinarian immediately. If caught early enough in labor, your veterinarian may be able to reposition the foal for a normal delivery. Remember, a prompt delivery is crucial to the health of the newborn foal.
- Unless it is a dire emergency, do not try to pull a foal. An exception to this rule might include a backwards presentation (or "Red Bag Delivery"), because the foal can suffocate unless delivered promptly. Under no circumstances should you ever pull with anything more than your own muscle power, and pull only during a contraction (when the mare is straining). Improper pulling risks damage to the mare's reproductive tract, injury to the foal and premature separation of the umbilical cord, which will deprive the foal of oxygen.
- Many foals begin life with weak legs. Don't be overly concerned if the baby is down in the pasterns and fetlocks for the first day or two of life. They will generally straighten up. However, if you see extreme deviations of limbs or note other physical problems, or the condition persists, consult your veterinarian. It is always a good idea to have your veterinarian do a post-partum examination of both the mare and foal, as well as the placenta.

A FINAL NOTE

Nature has provided an efficient system for the mare to deliver and care for her young. Be a prepared and informed owner so you can enjoy the miracle of birth, keep your anxiety in check and help the new mother and foal get off to a great start.

For more information, contact your veterinarian.

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More information can also be obtained by visiting the AAEP's horse health website, www.myHorseMatters.com.