



Quality and Concern in Equine Practice
Serving Colorado Springs and Southern Colorado

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**Colorado Equine
Veterinary Services,**

*A full-service, equine
wellness, critical care and
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Foaling—Prenatal Care

The mare must be in good health to carry a foal to term. Nature prevents mares in poor health from cycling and conceiving normally.

The mare should be at her ideal weight prior to breeding. Your veterinarian can help with routine dentistry to promote proper digestion. Producing a healthy foal requires the mare to eat and digest substantially more calories than an idle, open mare.

CEVS Veterinarians can recommend specific vaccinations for your mare. Parasites can be controlled with a combination of safe and effective dewormers given at appropriate intervals, good hygiene which removes infested manure, and periodic fecal exams to check for resistant parasites.

After breeding, the mare's nutritional needs do not increase significantly until the 7th month of gestation, and they continue at this increased level through nursing until the foal eats significant calories through grazing or feeds. Besides an increase in calories, vitamin A is very important for the broodmare, especially during colostrum production. Vitamin A is found in good quality hay and green grass, which vary in availability based on geographic location and time of year. Minerals - especially calcium and phosphorous, but also copper and zinc, are important in the skeletal development of the foal. Grass hays and alfalfa have significantly different levels of minerals, so supplementation with the appropriate mineral balance, based upon the forage being fed, is required.

Viral abortions occur in mares, and vaccination at periodic intervals throughout pregnancy prevents most cases. Boostering your mare with all routine vaccinations approximately 30 days before delivery will fill her colostrum (first milk) with antibodies to protect the newborn foal while its own immune system is still immature. The foal is able to absorb these antibodies only within the first few hours of life, so timing is critical. Failure to receive these antibodies on time, either due to poor colostrum or inability of the foal to suckle, will require a transfusion of antibody rich plasma to protect the foal.

The mare should not be strenuously exercised as she grows heavy with foal, but she should be allowed to exercise at will in a large paddock. House pregnant mares together. If there is only one pregnant mare, be sure her companions aren't aggressive towards her as she nears term. She will need strength and endurance to deliver her foal. Obesity can impair delivery if fat is deposited in the birth canal.

Housing

Mares have foaled in open fields for generations, but to observe the mare and assist in case of trouble, a foaling stall should be prepared.

The stall should have smooth walls and doors, and provide enough room for a handler at the mare's head and an assistant to help with delivery. It needs to be large enough to house mare and foal after delivery, especially to provide shelter from severe weather and confinement in case of injury or illness. While it shouldn't be drafty, adequate ventilation reduces respiratory problems. Disinfect the stall, allow it to dry, and bed with straw. Sawdust can block the nasal passages of a damp newborn foal.

Adequate light to assist the mare will make the job much easier. A small night light will facilitate checking the mare without disturbing her.

While a heat lamp may be necessary for a weak foal, infrared lamps can become too hot and pose a fire hazard. Keep the lamp and wiring protected from damage by mare or foal, and be certain the foal can move away from the lamp should it become too warm.

A safe paddock should be provided for the mare and newborn foal to exercise alone for a few days, until the foal is strong enough to run with other mares and foals. Some geldings will chase foals to the point of injury, so group your horses accordingly. Safe fencing is important as small hooves are easily trapped in wire and foals can slip out through small gaps in the fence.

Supplies

Foaling kits should include a clean tail wrap, sterile gloves to assist the delivery, towels to dry the foal, a disinfectant for the navel, a clamp for the umbilical cord if there is excessive bleeding, a baby bottle to fill with colostrum in case the foal is too weak to nurse, and an enema. A clock to note when the water breaks and the mare's progress is critical. If the mare has a history of poor milk production, or she has been grazing on fescue grass infected with endophyte, frozen colostrum should be on hand. Your veterinarian may add items to this kit as needed for your individual mare.

Alert your veterinarian when your mare's due date approaches and have the clinic's phone number readily available.

Foaling Monitors

A variety of options exist to monitor the late term mare. Foaling monitors on a surcingle around the mare's girth sound an alarm in the house when the mare lies on her side. Monitors placed in the vagina are expelled at the beginning of delivery and sound an alarm when exposed to ambient temperature. Monitors sutured across the vulva sound an alarm when the foal's hooves break their magnetic connection.—These monitors can save foals.

Signs of Impending Delivery

While gestation averages 340 days, but most mares don't read the book. Mares may become restless, go off feed, or stand with their tails touching the wall as they grow heavy in late gestation. They may sleep lying down in the straw, snoring fitfully. Signs of impending delivery include growth of the udder in the last 3 or 4 weeks before delivery and softening of the muscles and ligaments surrounding the pelvis. The teats become covered with wax, a sticky secretion of the udder, which may be flushed out by first milk, which may stream down the legs. Delivery is impending and the mare needs to be closely monitored.

Delivery

Mares usually sweat or “heat up” as stage one labor begins.

Once the water breaks, delivery proceeds quickly. The foal, which was lying on its back with its ears near the pelvis and its tail pointing towards the mare’s head, must roll onto its stomach and extend its forelegs into the birth canal. The neck must extend, with the nose coming to rest on its knees. This compact “diving” position allows the foal to slip through the mare’s pelvis. A hoof should soon appear beneath the mare’s tail wrapped in a thin white membrane.

- ♦ **If no legs appear - Call Colorado Equine Veterinary Services!**
- ♦ **If the sac is red and meaty - Call Colorado Equine Veterinary Services!**

The second hoof is a few inches behind, and the nose rests on the foal’s knees.

- ♦ **If only one leg appears - Call Colorado Equine Veterinary Services!**
- ♦ **If hooves appear, but the frogs are up, rather than down, the foal is coming out hind feet first and may need assistance. Call Colorado Equine Veterinary Services!**

At this time the shoulders of the foal are in the birth canal, and the mare will have strenuous contractions. This should take only a few minutes. When the shoulders are through, the mare will rest briefly, and then push again to deliver the foal’s hips. When the hips are through the birth canal delivery is over. From the water breaking until the hips are delivered averages about 30 minutes.

- ♦ **If 30 minutes pass with no progress - Call Colorado Equine Veterinary Services!**

Do not disturb the mare if delivery has progressed normally. Blood and oxygen are passing still through the umbilical cord to the foal. Wait until the mare stands and breaks the cord naturally. At that point disinfect the navel and rub the foal dry.

Post-partum.

The afterbirth should pass within a few hours of the time the water broke. Tie up the membranes so the mare does not pull them out or tear them by stepping on them. Save the membranes in a bucket of water for veterinary inspection.

If delivery was normal and the foal stands in an hour and nurses in three hours, your vet can examine the mare and foal the next day. If anything is not normal, the vet should come now.

Some mild colic pain after delivery is normal, as the uterus contracts.

- ♦ **Sweating that continues after delivery may mean a ruptured uterine artery and serious internal hemorrhage. Call Colorado Equine Veterinary Services!**

The foal should pass meconium - the dark, hard first manure - shortly after standing. When the meconium is gone the manure becomes tan, from digested milk. Enemas may assist the foal in passing meconium.