



WHAT TO EXPECT WHEN ...

Your Mare Is Expecting

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Congratulations, your mare has been successfully confirmed in foal! Now what?

First, know that you have lots of time to prepare. The average gestation length of the mare is 340 days (range of 315-365 days), which gives you sufficient time to prepare for the birth of your new foal. In this article, we discuss routine mare health care up until foaling along with what to expect before, during, and after foaling.

During the first 60 days of pregnancy, the mare should be minimally stressed. Little to no transportation should take place, and the mare should not be vaccinated or dewormed. Exercise should be light with no vigorous work or training. The mare should continue to be fed a maintenance ration and should maintain or slightly increase her weight during this period.

Daily and Veterinary Care

Pregnant mares should be allowed ample turnout or light exercise throughout their

pregnancy. Light riding can continue into the second trimester but should cease after that. As mares enter the last trimester, the act of simply grazing will give a mare enough exercise in a day. Pregnant mares should be stalled as little as possible during the pregnancy; movement will prevent lymphatic buildup (edema) in their legs and abdomen. Pregnant mares should continue to receive routine farrier care throughout the pregnancy.

All pregnant mares should be vaccinated against Rhinopneumonitis virus at 5, 7, and 9 months of gestation to prevent viral abortion. For high-risk or heavily populated farms, these vaccines should be started at 3 months of gestation.

Additionally, pregnant mares should be isolated from any horses that travel or are new to the property. Approximately 30-45 days before her foaling date, the mare should be vaccinated for Eastern and Western Encephalomyelitis, West Nile Virus, Tetanus, and Rabies. Risk-based

vaccinations, including Influenza, Rhinopneumonitis, and Potomac Horse Fever, should also be considered. This will increase the antibody levels in the mare's colostrum and help protect the newborn foal from disease. Your veterinarian should check for a caslick (suture in the vulva). If present it should be removed to prevent tearing of the perineum during birth.

Consult with your veterinarian to determine a deworming program that fits the needs of each mare. Mares should be dewormed within the first week after foaling because the mare's feces will serve as a primary source of parasite infection for the foal.

Nutrition

Your pregnant mare can continue with her maintenance ration through the first 7 months of gestation. Ideally, her ration will consist of good-quality forage similar to what she consumed before pregnancy. During the last 3-4 months of gestation, the foal's growth will exponentially increase and will correlate with the mare's need for increased energy. This time period often correlates with cold winter months, and that's a consideration when making sure nutritional requirements are met. The mare will need to meet not only her requirements but also those of her rapidly growing fetus. Adding in concentrates, such as grains or ration balancers, can help add energy and nutrition to the diet.

Careful evaluation of the mare's body condition will aid in making sure that the mare is receiving the nutritional requirements that are needed in each stage of gestation. Pregnant mares should not become too thin or obese at any stage of pregnancy. Mares must have access to clean, fresh water at all times.

Prepartum Period

As we reach the final weeks and days before your foal is born, you will start to notice changes to your mare's body. The udder will usually start to fill two to four weeks before foaling. This is followed by distension of the teats 4-6 days pre-foaling. Then, one to four days pre-foaling, you'll see waxing of the teats (small beads of colostrum on the teat (Image 1.)

This can be accompanied by less obvious changes, including softening of the ligaments around the tailhead, relaxation of the vulva, and a visible change in the position of the foal. As we approach the due date, the electrolyte composition of the mare's udder secretions will start to change in preparation for foaling. This change allows us to either use a milk calcium test or pH test strips to help determine when she will foal or – more importantly – that she is not likely to foal.

Milk calcium or pH testing can be used stall side and help predict when a mare is less likely to foal. Either test



Image 1 Filled udder with small beads of wax at tip of teats, indicating that the mare is close to foaling.

Key Points

- Mares should be vaccinated at 3, 5, 7, and 9 months of age for rhinopneumonitis
- Mares should receive vaccines at 10 months of gestation
- Develop a birthing plan with your veterinarian
- Foals should stand by 1 hour and nurse at 2 hours
- Mares should pass placenta by 3 hours post-foaling

requires a small amount of secretions milked from the udder. With milk calcium, we look for a sudden increase in calcium levels; with pH strips, we are looking for a sudden decrease in pH levels. When the pH reaches 6.4 or lower, or when calcium levels are greater than 200 ppm, there's a 97% chance the mare will foal within 72 hours.

Mares need a safe, clean place to foal, preferably one that is quiet and away from horses that may disturb the birthing process. Mares may foal in the pasture or a stall, depending on your preference. A grass pasture provides lots of room for the mare and is probably cleaner than a stall. However, the stall does have the advantage of allowing for monitoring during the night by either a camera or quiet attendant.

If you choose to foal in a stall, a large space should be provided. A minimum of 14' x 14' is recommended. Ideally, the stall should be bedded with straw; shavings tend to cling to the newborn and can serve as a source of bacteria when wet. Keep the stall as clean as possible. Regularly remove all manure and soiled bedding.

Mares often give indicators that they will soon give birth. Examples include showing signs of restlessness or other

changes in behavior, elongation of the vulva, relaxation of the ligaments surrounding the tailhead, and dripping of milk from the udder. This is not the rule for every mare. Until their water breaks, some mares show no indication that parturition is near. As mares enter stage 1 of labor, small contractions will occur. During this period a mare is often restless and appears colicky. She may also lie down and get back up, look at her flank, swish her tail, or urinate frequently. Stage 1 labor should last 1-2 hours, ending with the mare's water breaking or rupture of the allantoic membrane. That's the official start of Stage 2 (the delivery stage). If Stage 1 continues beyond 2 hours, immediately contact your veterinarian.

Foaling (Stage 2 - Parturition)

The process of foaling should be relatively quick, lasting 20-30 minutes. If progress has not been made within 15 minutes, intervention may be needed, and your veterinarian should be contacted. It is a good idea to set a timer or take note of the time when you see the water break, because the perception of time can often be altered in these situations. Have your veterinarian's number saved to your phone or posted at the stall. We encourage discussing plans with your veterinarians before foaling to determine a course of action if things do not proceed in a normal manner.

If the mare is making progress and the foal starts to become visible, wait and watch. Normal presentation of the foal is front feet first with soles down. One foot should be slightly in front of the other; the head is nestled between the front legs. If you notice the tip of the toes pointing toward the ground, this may indicate the foal is backward or upside down, and you should call your veterinarian immediately.

The most deadly of foaling emergencies is premature release of the placenta (also known as a red bag delivery). If the red membrane is noted before the foal's legs and head, immediate intervention needs to be taken to save the foal's life. The membrane should be cut or torn open quickly to deliver the foal. There is no time to call the veterinarian. The placenta serves as a source of oxygen to the foal, and with premature separation, the foal loses oxygenation and can die quickly. Normal membranes that cover the foal are white to yellow and translucent.

Postpartum (Stage 3)

Once the foal is safely delivered, the mare and foal may lie quietly for a few moments, or the mare may immediately stand and start bonding with the foal. The translucent membranes may be removed from the foal if the foal

doesn't immediately break through. Try to allow the mare or foal to break the umbilical cord without assistance. The cord has a natural breaking spot about 1 inch from the foal's body wall. This space is narrower than the rest of the cord. If the cord needs to be manually broken, it should be done with a simultaneous pulling and twisting motion. This encourages the umbilical cord to naturally close. The cord should never be cut.

The foal should stand in about 1 hour and be successfully nursing by hour 2. The mare should pass the entire placenta by hour 3. Examine the placenta to ensure that the tips of both horns are present, or place it in a bucket or trash bag and save it for the veterinarian to examine. If the mare has not passed her placenta within 3 hours, or the foal has not nursed within 2 hours, your veterinarian should be contacted because both situations can lead to serious, life-threatening diseases. The foal's umbilicus should be dipped in a diluted chlorhexidine solution (1:4) twice daily for the first 3-5 days, to prevent umbilical infections.

Colostrum is vitally important for the foal in the first hours of life. It is a critical source of antibodies and nutrition and serves as a primer of the foal's immune system. As mentioned above, the foal should be nursing by 2 hours after foaling and should continue regularly. Your veterinarian should examine the mare and foal 12-24 hours after birth and perform an IgG test on the foal. This test will ensure that the foal received adequate colostrum and that a plasma transfusion is not necessary to ensure that the foal receives adequate antibodies.

The veterinarian will check the placenta and perform a post-partum exam on the mare to make sure she did not retain fetal membranes or tear anything during the birthing process. Retained fetal membranes can result in serious health consequences for the mare.

If at any time you have concerns about the foal or mare during the post-partum period, consult your veterinarian.