



## **New Foal Information**

Spring is around the corner, and with that, we are starting to see some foals. Few things are more rewarding than having a healthy foal, and few things more scary than having a sick foal. Early recognition of problems is key to achieving the best possible outcome.

### **Normal Foal Behavior**

Soon after birth, a normal foal will develop a regular breathing pattern and struggle to sit up. Most foals should be standing within 1 hour and suckling within 2 hours. If a foal is having trouble nursing within the first few hours or has a poor suckle reflex, a veterinarian should be contacted. We strongly discourage feeding the foal with a bottle!!! Foals typically start passing feces within a few hours of birth and start urinating 6-10 hours after birth. Foals should nurse for short periods of time several times per hour. A normal routine for a foal would be to get up, nurse, urinate, and lie back down.

### **What is colostrum and why is it important?**

Colostrum is the first milk produced by the mare. Good quality colostrum is thick, yellowish to greenish, and very sticky. Colostrum contains special proteins called immunoglobulins, or antibodies, that fight disease-causing organisms. The foal absorbs these proteins through its intestinal tract during the first 12-24 hours of life. The foal is born without its own immunoglobulins, so it needs the colostrum immunoglobulins for protection against infections during the first few months of life.

Your veterinarian will test the foal's immunoglobulin level during the newborn exam. If the test indicates that the foal did not absorb enough from the colostrum, we will supplement the foal with horse plasma or a synthetic immunoglobulin product called Seramune. If the mare does not have milk, the foal will need to be supplemented.

### **Why is bottle-feeding a foal bad?**

Although many people, even some veterinarians, may suggest feeding colostrum to a foal with a bottle, serious and potentially fatal complications commonly occur. Newborn foals often do not have good control of their swallowing mechanism so they may aspirate milk into their lungs. Feeding with a bottle increases this risk because it often lets too much milk into their mouth and is an unnatural angle for the foal to drink from. Bottle feeding a foal that is slow to nurse can be especially risky because those foals may have a weak suckle and even poorer control of swallowing. Aspiration of milk can quickly lead to severe pneumonia that can be expensive and difficult to treat. An alternative to feeding with a bottle is to offer milk in a bucket or pan.

### **What is meconium?**

Meconium is the first feces passed by the foal. It is dark and well formed - almost like dog feces. Foals start passing this within hours of birth and may continue to pass it for 24 hours or so. After that time, all foal manure should be yellow and pasty (milk feces). Normal milk feces may be hard to find in the stall, so don't be alarmed as long as the foal is acting normal and continues to nurse.

Sometimes the foal has trouble passing all of the meconium, which can lead to an impaction in the intestines. The foal may show signs of discomfort such as decreased interest in nursing, straining, tail flagging, or rolling. A simple enema may help the foal pass the meconium, but if the foal is showing more severe colic signs like rolling or biting at its sides or if signs persist after an enema, the foal should be examined by a veterinarian.

## **Why should I have the veterinarian examine my new foal?**

Your veterinarian should examine your new foal 10-12 hours after it is born or sooner if there are any problems. We will examine the mare to make sure she has not had any complications after birth, has passed all of her placenta, and is producing adequate milk for the foal. If possible, save the placenta in a bag or bucket so the veterinarian can examine it for completeness and any other abnormalities. The mare can get very sick if she does not pass all of her placenta (called “retained placental membranes”).

We will also do a thorough physical exam on the foal. Specifically, we will check for a strong suckle response, cleft palate, eye abnormalities, fractured ribs, umbilical abnormalities, retained meconium, and joint or limb problems. We will do a blood test to make sure the foal got enough colostrum and treat accordingly if it did not. Another blood test is done back at the hospital to check the foal’s immune system (complete blood count-CBC). We may suggest other tests or treatments at this time if there are any indications of problems.

## **What are signs of potential problem with my foal?**

- Severe flexural or angular deformities of the limbs that prevent foal from standing on own
- Not nursing within 3 hours of birth
- Brown or dark yellow staining of the foal or placenta at birth
- Signs of prematurity: silky wavy hair coat, floppy ears, very lax fetlocks, a lot of rubbery tissue on the hooves, domed head
- Straining to urinate or defecate
- Persistent tail-flagging
- Rolling up on back, biting at sides repeatedly
- Lack of interest in nursing
- Listlessness or weakness
- Aimless wandering around stall
- Swelling, discharge, or urine coming from umbilicus – stump should shrivel up within a few days
- Lameness, swelling or heat in limbs

## **Preparing for foaling**

Preplanning can prevent disaster. First and foremost, have your veterinarian’s phone number easily accessible. If you are new to foaling, having someone more experienced available may be a big help.

Wash the mare’s udder and hind end a few days prior to her anticipated foaling. This will decrease exposure of the foal to debris when it tries to nurse. Make sure your foaling area is kept clean and dry and is an adequate size to allow for safe foaling. A base layer of shavings with a top layer of straw makes great foaling bedding.

Once the foal is out, let the mare and foal bond for a few minutes before rushing into the stall. They have both been through a traumatic experience!

Have a supply of clean towels to help dry the foal once the mare and foal have had a chance to bond. The foal’s umbilical stump (naval) should be dipped in a disinfectant to protect against infection. Chlorhexidine (Nolvasan) SOLUTION diluted 1:4 with water is a great choice. Betadine can be used but is much more irritating to the foal’s tender skin. A Fleet enema may be given to the foal to encourage passage of the meconium (formed fecal balls). Additional enemas should only be given under the advice of your veterinarian.

## **Changes in the mare as foaling nears**

Most due dates are calculated as 341 days after ovulation, although the normal gestational length can vary between 320 and 360 days. An individual mare will usually be fairly consistent in gestation length from year to year, so knowing your mare's foaling history can be helpful. There are several changes in the mare's body that will help determine when the mare is getting close to foaling. Two to four weeks before foaling, the mare will start to develop an udder, which will become more engorged within days of foaling. Any mare that bags up and starts producing milk prior to the 10th month of gestation should be examined by a veterinarian. This may indicate a problem with the pregnancy such as placental infection, an abnormality with the foal, or twins.

A few days prior to foaling, the muscles around the tail head will relax. Wax is usually seen on the teats 1-3 days before foaling, although it is easily knocked off and may be missed. Within 1 day of foaling, the mare's vulva will become swollen and elongated. The mare may also pass a large amount of manure the day of foaling.

## **The Birthing Process**

We divide the birthing process (parturition) into three stages.

### **Stage 1: Preparation Period**

This initial period may last for several hours prior to foaling. During this time, the foal is moving into the proper foaling position and the mare's reproductive tract is preparing for birth. The mare may be restless, circling, and get up and down repeatedly. Stage 1 ends with rupture of the allantoic membrane (water breaking).

### **Stage 2: Birth of the Foal**

Once the water breaks, the foal should be born within 20 minutes. The two front feet should be visible first with the foal's nose extended on top of the legs. If this is not visible shortly after the water breaks or if significant progress does not occur in 10 minutes, the mare may require assistance. This should only be done by or under the guidance of someone experienced in foaling or a veterinarian. Once the foal is out, the umbilical cord should rupture naturally. This may not occur until the mare stands. If it does not break, do not cut the cord and seek assistance for the proper technique to break it without causing injury to the foal.

### **Stage 3: Passage of the Placenta**

The mare should pass all of the placental membranes within 3 hours of foaling. The hanging end should be tied up above the mare's hocks but should not be cut because the natural weight will help loosen the rest of the placenta. A retained placenta should never be pulled! Contact your veterinarian if the placenta does not come out within 3 hours or is obviously incomplete. Once the placenta is out, remove it from the stall and place in a bag or bucket so your veterinarian can examine it the next day.

## **Problems after foaling**

**Contact your veterinarian if you observe any of the following problems:**

- Placenta does not pass within 3-4 hours of birth
- There is an obvious piece of placenta missing.
- The mare is showing persistent signs of colic. (Some mares will be crampy while passing the placenta, but these signs should not be severe and should subside soon afterwards.)
- The mare is not passing manure within 6-12 hours after foaling.
- The mare has a poor appetite or fever (temp>101 F).