



## **Foaling Equipment**

- Brown Gauze (wrap mare's tail)
- Betadine Solution or diluted nolvasan solution (dip navel)
- 6cc syringe casing or small cups (put the iodine or nolvasan in, in order to dip the navel)
- Enema (Fleet) Available at pharmacies/grocery stores
- Towels
- Oxytocin
- Sedation
- Banamine
- Syringes & Needles
- Gloves (Latex & Rectal)
- Clinic Phone: (209) 847-5951
- Scissors
- Bucket with warm water

## **Stalls & Bedding**

As the mares get closer to foaling, they should be brought in at night. If these mares are recipients and are out in pasture, you might want to think about bringing them in at night a couple weeks before they are due just so they get used to being in a stall. It's ok to turn them out in the day in a small grass pasture; if they foal out there...great; It's most likely a lot cleaner than in barn stall, even a clean one. Just make sure that they aren't in a huge pasture with a lot of horses; if you can get a small one where the two of them can be turned out together, that would be great. If she does foal out in pasture, just make sure that the other mare does stay away from them (you can catch the other mare and put her away); horses are insanely curious and will want to be right next to their friend and see what is going on. Others may try to steal the foal as their own so just stay close. Let the foal stand before trying to move them into a stall.

Stalls should be cleaned and disinfected prior to foaling. There are many different types of bedding that is used from straw to shavings. Whatever you decide to use, just make sure that it is of good quality and not dusty.

## Signs of Foaling

### Physical Changes:

1. Belly will drop as foal positions itself correctly and they will develop a “hollow” area in their flanks.
2. Udder and teats will fill:
  - a. Can get a good view from the back end as the mare walks
  - b. A tight bag will be V-shaped and will have no wrinkles; it will hit against her legs as she walks.
3. Wax on teats
  - a. Some mares will wax and foal within 24 hours. Others will wax for days and then start to drip milk. Others won't wax at all before foaling.
  - b. Colostrum is thick, off-white, and sticky. If your mare starts to get wax, look at it and feel it between your fingers. Non-colostrum milk is lighter than colostrums and won't be sticky. Mares will have this type of milk before they have colostrum. It is a sign that they are getting closer but they will generally be a few days away from foaling with this type of milk.
4. As her pelvic ligaments loosen, her croup area will loosen; her vulva will also become longer and will lose its “wrinkles”
  - a. These changes will be noticeable if you observe the mare everyday.
  - b. Just look at her vulva daily and push her croup area to see how loose it is.
5. You will usually see dramatic changes in the pelvic area within 12 hours of foaling.
6. Looser than normal feces

**Behavioral Changes:** These can occur for just a few hours or a few days before foaling, depending on the mare.

1. Off feed
2. Pacing
3. Constant getting up and laying down
4. Kicking/looking at her belly
5. As most mares get closer to foaling, they will lie down more often and they will groan periodically for awhile. Then they will get up, eat, and not think any more of it. This fools a lot of people to thinking that they are absolutely going to foal when in fact, they are probably just uncomfortable. This is normal so don't be alarmed. It is when they are restless that they are more likely to foal.

## Parturition

1. Water breaking
  - a. Normal labor will be complete within 15-30 minutes of the water breaking.
2. Normal foal position is two front feet with hooves facing downward; head to appear a little bit after the front feet appear
  - a. Two front feet will usually not appear at the same time; they usually are a little bit staggered.
  - b. If you don't see this type of foal position, call Pioneer immediately.
3. What to do
  - a. Let the mare get comfortable
    - i. Some mares will find a position within a few minutes of breaking her water; others take a long time to position themselves in a manner that they desire.
    - ii. If you try to go help her while she is still not sure as to what she wants to do, she may become distracted, especially since both of your mares are recipients. Pick a corner (don't get stuck) and just squat and observe.
    - iii. As the foal comes out, it should start to breathe immediately. Most foals will also try to get sternal immediately as well. The passage of its chest through her pelvis is a stimulant to make the foal breathe.
    - iv. Make sure the sac is pulled away from its face and wipe its nose of any fluid that may be coming out.
    - v. At this point, the umbilical cord should still be attached to the foal's navel; try to leave that connection for as long as possible. This is somewhat mare dependant. Some mares will stay laying down for a little bit, which makes this easy. Others want to get up immediately. If they do, they do; don't try to prevent them. But try not to distract them and give them a reason to get up either.
4. "Crampy" Mares
  - a. All mares will be slightly crampy after they foal which is understandable.
  - b. If a mare is violent immediately after foaling (thrashing, rolling), just get the foal out of the way as quickly as possible. (Probably drag it towards the stall door in case of the need to pull it out completely of the stall).
    - i. This doesn't happen a lot but if a mare has had a difficult birth, she may be in that much pain.
    - ii. Anti-inflammatories or medical therapy may be indicated, consult with Pioneer prior to giving any medication to your mare.

- c. If the mare is just mildly uncomfortable (shifting her weight back and forth, light pawing), I would just leave her alone in terms of administering any medication.
  - i. The “cramps” help pass her placenta (really try to avoid giving banamine until after she passes her placenta; do it when only necessary) and it also helps to clean her uterus out.
  - ii. If she has passed her placenta and is acting more than “mildly uncomfortable”, she may need anti-inflammatories. Consult Pioneer prior to giving medications to your post-partum mare.

## **Post Partum Care**

1. There are many different ways that you can care for the immediate newborn foal. Our way is the “hands-off” approach.
  - a. We do only what is necessary and let the dam do the rest and bond with her foal.
  - b. Once the umbilical cord breaks, we will dip its umbilicus with betadine solution or diluted nolvasan (3:1 dilution ration of water:nolvasan).
  - c. We also tie up the amnionic sac so that the mare doesn’t step on it and tear it off
    - i. You can use baling twine to tie it up
    - ii. The weight of the sac helps in the passing of the placenta so it is important to try and preserve its attachment to the placenta.
    - iii. Most mares at this point are preoccupied with licking their foal so they won’t pay too much attention to you but always keep an eye on her, especially with recipients
  - d. Once you get the placenta tied up and navel dipped, leave the mare and foal alone.
    - i. If the mare is a good dam, she will immediately start to lick and bond with the foal.
    - ii. You can wipe the foal down a little bit with a towel but we generally leave most of it up to the mare to do so.
    - iii. Watch the mare’s behavior
      1. If she seems really nervous that you are still there, we would just walk away and leave them completely alone for awhile.
      2. If she doesn’t seem to mind that you are standing there, then we would still stay out of her stall as much as possible and observe from the outside.
  - e. The mare’s placenta should pass normally within an hour to an hour and a half.

- i. If it hasn't passed within 3 hours post foaling, call Pioneer. it is important to get it removed as soon as reasonably possible due to septic reasons.
  - ii. Once the placenta has come out, it should be looked at by a veterinarian at Pioneer.
- f. Meconium
  - i. Meconium is the foal's first poop!!
    1. They store it all up while in the womb so they will start straining to eliminate it.
    2. Some will pass it while laying down while others won't try until they are standing up.
    3. It is dark brown in color and you will be amazed at how much some of those little ones can pass!!
    4. If they are still straining with little success (tail up in the air), go ahead and give them an enema.
      - a. Enemas can cause diarrhea so only use when necessary and only give up to two.
      - b. If they are still constipated, try warm water with mild soap (dilute ivory)
- g. Standing
  - i. The 2<sup>nd</sup> most frustrating thing to watch...which is why we usually walk away and let them figure it out.
  - ii. Most foals will attempt to start to figure it out within the first half hour. Some will get it immediately, others will still be struggling for over an hour with it.
  - iii. Make sure to have a thick layer of bedding so that they have a good support and not a slick surface to deal with.
- h. Nursing
  - i. The 1<sup>st</sup> most frustrating thing to watch....again, just walk away for a little bit and check on them regularly...if your mare is good.
  - ii. If a mare is good, she will help her foals find the udder.
  - iii. Some foals will nurse everything (stall walls, mare's chest, etc) before they find the udder; its trial and error. Some get it immediately, others take a couple hours....totally normal.
  - iv. If you have a maiden mare or a nervous mare, they will tend to not allow the foal to back towards the udder. Most will eventually get it figured out. This is another reason why that we like to leave nervous mares alone. If they are preoccupied with you being there, they may not let the foal nurse b/c they want it directly in front of them where they can see it.
    1. If it has been ~3 hours and the mare hasn't let the foal nurse, you can try to intervene then.

2. Halter the mare and put her butt into a corner. Hold her there while the foal tries to find the udder. Don't try to help the foal find it; most will resent the force and will try to get away from you rather than try to nurse. If the mare is really bad, she can always be sedated.
3. Once the foal has nursed once, it becomes a lot easier. You might have to go in there a couple more times and hold her but they generally become accustomed after a couple times. Just observe frequently.

## 2. IgG Test

- a. This test reads the level of antibodies that the foal received from the mare's colostrum.

### i. Passive immunity

1. The way that the foal protects itself from viruses when they are born is thru passive immunity.
2. The mares should be vaccinated with "one-month priors" approximately 30 days from their expected due date. This puts antibodies into their colostrum (Mares should also be wormed at the same time and should be wormed again about a week after foaling).
  - a. Pioneer recommends a 5-way and WNV for their one month priors.
3. When a foal is born, it is born with no antibodies whatsoever. However, during the first 12 hours of its life, it is able to absorb the antibodies from the colostrum thru its gut wall. This ability, decreases dramatically after 12 hours and is virtually non-existent by 24 hours. This is why it is critically important for the foal to nurse within a reasonable amount of time from foaling.
  - a. When the foal nurses, it absorbs the antibodies from the colostrum and therefore receives some protection against the environment thru passive immunity (passed from dam to foal).
4. If the mare is not vaccinated prior to foaling, then the foal needs to start getting vaccinated at about 3-4 months of age. If it has received antibodies through passive immunity, vaccination is not recommended until about 5-7 months of age.

### ii. There are several methods of taking this test

1. The one that PEH uses is the SNAP kit test.
2. Blood should be taken at ~ 12 hours of the foal's life. Antibody levels should be greater than 800ng/ml.

3. If it is below that, then it is recommended to administer plasma to the foal to introduce antibodies into their bodies.
3. Plasma Administration (optional)
  - a. Some farms will give plasma to their foals no matter what their IgG levels are.
    - i. The farms that do this are generally farms with a high volume of mares and foals that have a greater chance of getting a viral breakout.
    - ii. Others just do it to give their foals an extra boost.
    - iii. If administered, plasma needs to be given in the first 24 hours of life, followed by a booster at about 3 weeks.
    - iv. This is totally optional to you. If you have any further questions about it, please call us.