**Foaling Protocol**

1. \*\*Mares gestation length averages 340 days (~11 months) (+/- 3 weeks can be normal)
   1. Udder enlarges with milk ~2-4wks prior
   2. Teats engorge ~6 days prior
   3. Vulva relaxes and enlarges a ~3 days prior
   4. “Waxing” of teats occurs 1-4 days prior
   5. Potassium > Sodium in mare’s milk 1-2 days prior
   6. +/- calcium spike in mare’s milk the day of parturition
   7. Decreased rectal temperature by ~2 degrees the day of parturition
2. Mare care prior to foaling:
   1. Refer to our Equine vaccine and deworming guidelines for recommended vaccinations and deworming schedules in pregnant mares.
   2. Deworm mares with Ivermectin within a couple weeks of foaling date
   3. +/- Testing mare for Neonatal Isoerythrolysis (more info below) within 2 weeks of due date and every 2 weeks until she foals if she goes past her due date
      1. This condition is rare but can be deadly to the foal
      2. If mare has a Hx of NI or tests positive, begin her on Domperidone treatment ~3 days prior to her due date (or when teats begin to wax) and milk out all of her colostrum prior to foaling.
   4. Prior to foaling you should place the mare in a dry, clean stall or pen with ample fresh bedding where she can be monitored closely. You should wrap the mare’s tail and clean her udder, vulva and hind end using a chlorhexidine or antibacterial soft soap, this will help prevent bacterial infections in the foal during and after birth.
3. At this time we do not foal out mares at the clinic, however we are happy to help with any foaling issues and have a doctor on call 24/7 for questions or emergencies.
4. Items to have on hand for foaling: tail wrap, chlorhexidine or iodine solution in a container to dip umbilicus, towels, Banamine (Flunixin Meglumine), Domperidone, Oxytocin, thermometer, infant suction bulb, lube and gloves and access to an alternative source of colostrum
5. Stages of labor, what to look for and when to call
   1. Stage 1 of labor can take several hours and is indicated by the mare showing restless behavior
      1. If noticed, we recommend giving your veterinarian a heads up when the mare begins showing signs of stage 1 labor (i.e. restlessness, circling, up/down, looking or kicking at abdomen and sweating)
      2. \*\*Call your veterinarian ASAP if the first stage of labor is lasting longer than 4 hrs and or if the mare is showing signs of severe distress (i.e. profuse sweating with labored breathing, thrashing or violent rolling, pale gums or weakness)
      3. Stage 1 ends when the water sac breaks
   2. Stage 2 labor (parturition) begins when the water sac breaks
      1. The mare may be standing or lying down for stage 2 or a mix of both.
      2. Forward progression of parturition should be observed at least every 15min, most mares foal out within 30min of onset of Stage 2 labor
      3. \*\* Call your veterinarian ASAP if no progression is observed every 15 min after the water sac breaks
      4. \*\* Call your veterinarian or be prepared to assist (if comfortable doing so) if the soles of the foals’ hooves are facing upward (this indicates backward presentation of the foal and the mare may need assistance)
         1. If you choose to assist make sure to wear clean sleeved gloves and use plenty of lubrication
      5. Stage 2 labor ends when the foal is delivered
   3. \*\*Call your veterinarian immediately if a velvety “red bag” is protruding from the vulva at any stage, this indicates premature placental separation, it is rare but if it occurs it needs to be ripped or cut open and the foal delivered ASAP or the foal will suffocate. The owner will likely need to perform this act as waiting for a vet to arrive may take too long.
   4. Stage 3 of labor is the passing of the placenta/fetal membranes.
      1. The placenta should be fully passed within 4 hrs after birth.
      2. If the placenta does not come out with the foal you can tie it onto itself in knots at the level of the hock joints to act like a pendulum to help it come out slowly and gradually. \*\*\*Do NOT pull on it or try to remove it yourself.\*\*
      3. Put the placenta in a bucket for the Veterinarian to examine at the mare/foal exam.
      4. \*\* Call your veterinarian if the mare has not passed the placenta after 4hrs.
6. Once the foal is born:
   1. If the cord is not broken when the mare delivers lying down, it should break on its own when she stands up. \*\*Do NOT cut the cord.\*\* Call your Veterinarian for advice if the cord does not break when the mare stands.
   2. Ensure the foal is breathing and clear the foal’s nasal passage and throat of mucous (you can do this by sticking a finger into the back of the foals mouth to clear out mucous and by using a long piece of straw to tickle up into each nostril to stimulate the foal to sneeze, you can also use an infant suction tool)
   3. \*\*Dip the navel in chlorhexidine solution
   4. Check to make sure mare is producing milk, if no milk is observed and udder is small recommend giving mare a dose of Oxytocin and or Domperidone to stimulate milk production
   5. Leave the stall so the mare can care for her foal undisturbed
   6. \*\*The foal should be standing and nursing within 2hrs and urinate and pass meconium (first feces) within 12hrs
      1. \*\*It is vital that the foal ingest adequate colostrum within the first 12hrs of life, if nursing and intake of colostrum is not observed within 4hrs after birth, call your veterinarian.
      2. Observe the foal closely for the first couple of days to ensure it is urinating and defecating normally. Call your veterinarian if persistent straining or diarrhea is observed.
   7. \*\*We strongly encourage all clients to have a veterinarian perform a mare/foal exam within 10-12hrs post foaling. At this time, a veterinarian should perform a full exam on the mare and foal, test the foal’s IgG levels to ensure adequate transfer of immunity from the mare’s colostrum, check the mare for vaginal tearing and examine the placenta.
   8. \*\*The navel should continue to be treated with chlorhexidine 2x/day for 3 days post partum
   9. Neonatal Isoerythrolysis (NI)/Jaundice foal syndrome is a rare condition in which the mare and foal have different blood types and mare’s body produces antibodies that attack the foal’s red blood cells after the foal consumes the mare’s colostrum
      1. If your mare has a known history of NI, or tested positive prior to foaling, do NOT let the foal nurse the mare for the first 48hrs or until a Jaundice foal agglutination test comes back negative.
         1. These foals will need to be bottle fed an alternate source of colostrum and milk for the first 48hrs.
         2. It is recommended to place a foal muzzle on the foal so the mare and foal can continue bonding during this time without the foal nursing.
      2. If foals develop NI clinical signs are not observed until 6-72 hrs after birth
         1. Clinical signs include: jaundice/yellowing of gums and eyes, weakness, lethargy, fast shallow breathing and decreased suckling
         2. \*\* Call your veterinarian ASAP if these signs are observed
7. It is recommended to check the mare and foal’s rectal temperatures 2x/day for the first week after foaling (normal temp is 98-102F)
8. The mare should be monitored closely for signs of colic or abnormal vaginal discharge for 2-4 weeks post foaling
9. \*\*When in doubt call your Veterinarian with any concerns!!