Foaling Preparation

Bradford W. Daigneault, M.S., University of Illinois  daignea2@illinois.edu
February 2013

Winter is the time of year when many mares are in their last trimester of gestation or are close to foaling. Creating a checklist for your facility can be essential to mare and foal survival. Although many mares will successfully foal without aid, there are a few key considerations that every owner should be aware of when preparing for foaling.

Know your foaling date
A common mistake during foaling is the failure to accurately predict when a mare is due. Mares have a gestation time of approximately 342 days. Foaling within two weeks on either side of the predicted foaling date is not uncommon. One can simply calculate the day from the last insemination or exposure to a stallion for predicting when mares carrying their own foal will begin parturition, or birth. For embryo transfer mares, subtract an additional 7 days to account for the age of the embryo when it was transferred.

Examine mare for caslick’s
Once a foaling date is estimated, examine your mare to be certain that she has not had a caslick’s procedure in which the upper external portion of the labia have been closed to prevent infection or windsucking. Removal of the caslick’s should be accomplished within a month before foaling by an experienced person or veterinarian. Failure to remove a caslick’s prior to foaling can result in irreparable damage to the mare and death of the foal.

Prepare your facility
Foals that are delivered during the winter in Illinois can be exposed to harsh climates. Foals born outdoors in cold and wet weather can become immediately compromised. Bring mares into stalls or shelters at least three weeks prior to their foaling date. Mares can be monitored for signs of parturition and facilities can be prepared with appropriate bedding. A warm and dry facility that offers seclusion from members of the herd and people can help to relax the mare during the foaling process, allow for monitoring when parturition is near and provide easier observation to assure the foal is nursing well. An enclosed foaling area can also be beneficial for maiden mares that experience dystocia, or difficult birthing, or are reluctant to be caught and haltered during the foaling process.

Have a foaling kit on hand
There are commercial foaling kits available that every mare owner should have ready by the stall during foaling season. These kits include some basic necessities before, during and after parturition. Unlike cows, mares have only 20 to 30 minutes after the water has broken (placental membranes have ruptured) before the foal is compromised if it has not exited the birth canal. Kits include foaling straps in the event that the mare is not able to deliver the foal on her own within this allotted time span. Towels may not be included but should be available to dry off foals if necessary.
More complete lists of kits can be found online and made from home.

NI Testing
Occasionally, mares develop antibodies against red blood cells of their own foals during gestation. Mare production of antibodies against foals can occur if foals inherit a blood type from their sire. Antibody production can occur after traumatic breeding or from prior foaling. This potential disease is known as neonatal isoerythrolysis (NI). In such situations, when a foal nurses it can absorb antibodies produced by the mare. The foal’s immune system may become compromised leading to fatality. NI is easily remedied by muzzling the foal for the first 48 hours after birth and bottle feeding colostrum from a different mare. The dam should be stripped of milk during this time. Two to three weeks prior to foaling, blood can be pulled from the mare and serum sent to a laboratory for testing. For owners wishing to have their mares tested, they should allow adequate time for collecting blood serum, shipping, testing, and obtaining results before the foal is born. Maiden mares will likely not produce antibodies and should be exempt from testing in most situations.

Milk Tests
There are a number of signs that a mare is nearing her foaling date. One of the most accurate estimates of foaling is to measure milk calcium levels. A small amount of milk can be stripped from the mare’s udder when it begins to fill. Commercial milk test kits as well as some water hardness test kits are convenient and fairly accurate if the test is designed to measure calcium carbonate and avoids divalent cations such as magnesium. Milk testing can be a good way to prepare mares that may be reluctant to nurse by accustoming them to a similar sensation when milk is being stripped. For those who wish to freeze and bank colostrum after a foal is born, stripping mares before foaling can ease the process after foaling. Depending on the mare’s disposition and the experience of the handler, one or two people can accomplish milk stripping by either putting the mare in a stock or holding up the front leg of a mare that is reluctant to have her udder handled.

Although many mares will foal out with little or no help from the outside world, some will inevitably need assistance. The best way to assure a successful foaling process is to prepare a safe facility and have all tools necessary and readily available. Know your limitations and have a veterinarian or experienced person’s phone number in a place that is easy to locate.