

# Bay City Veterinary Clinic

## “Because We Care”

### Broodmare and Foal Management

We will try to cover many aspects of breeding from cycling to after care of the foal. We hope to help you feel more comfortable during this period and to answer many questions that are often asked during this period.

#### **Prior to Breeding**

Proper nutrition, de-worming, exercise and vaccinations will help ensure a healthy pregnancy.

**Nutrition:** The mare should go into the breeding season fit and perhaps gaining weight. Severely underweight mares will have more trouble conceiving than will mares of appropriate weight. To accommodate the mare's increased energy needs plenty of high quality hay and forage should be the bulk of the mare's diet. Concentrated feeds such as grains may be added to the ration to bolster energy intake without adding excess bulk. It is also important not to overfeed. Supplementing with vitamins and minerals is unnecessary in mares being fed a balanced diet. Plenty of fresh clean water should always be available to your mare. Use your mare's condition as a guide to how she is faring, and adjust rations accordingly. You do not want her to become obese.

**De-worming:** Most de-worming agents available today are relatively safe for pregnant mares. We recommend De-worming prior to breeding and every 60 days during pregnancy. It is important to de-worm the mare within several weeks of foaling, because the mare will be the primary source for infecting her foal with parasites. We can recommend a safe product for your mare during her pregnancy.

**Exercise:** Unless there are special circumstances, during the first seven months of pregnancy, treat your mare as you would a non-pregnant one. She will benefit from moderate riding or exercise. During the last four months of pregnancy, only light to moderate exercise is recommended. In fact, a pastured mare will get as much exercise as she needs just grazing. Vigorous exercise is not recommended.

**Vaccines:** Vaccinations should be current, since infectious diseases can trigger abortions. Inoculation for Eastern, Western and Venezuelan encephalomyelitis, influenza, and tetanus is recommended at the beginning of pregnancy. A booster should be given one month prior to foaling to increase the antibody level in the mare's colostrum (first milk) and help protect the newborn foal from disease. Also the mare should be vaccinated for equine rhinopneumonitis (commonly called virus abortion or rhino) at five seven and nine months' gestation.

**The average length of pregnancy is 338-343 days, however normal gestation can range from 320-380 days.**

**Suspect Abortion?** Mares do occasionally abort. If you notice a vaginal discharge or dripping milk during pregnancy, contact your veterinarian. It may be possible to ascertain the cause of abortion and treat the mare accordingly. If you find the remains of a

placenta or fetus, save it for your veterinarian to examine. A retained placenta can be life threatening to your mare.

### **A Safe Place to Foal**

Your mare will need a clean, safe quiet place to foal. An open grassy area is likely to be cleaner than a stall and provides a healthy environment with adequate room to foal. Should you choose to foal your mare in a stall, provide one that measures a minimum of 14' X 14' . If possible, the stall should have a floor that can be readily cleaned and disinfected Straw makes a good bedding because it won't cling to the wet newborn or mare the way small wood shavings can.

### **Impending Birth**

There are obvious as well as subtle signs of impending birth. Some of the more obvious signs are:

Filling of the udder (two to four weeks pre-foaling)

Distension of the teats (four to six days pre-foaling)

Waxing of the teats (one to four days pre-foaling)

Obvious dripping of milk

Some more subtle signs are:

The muscles of the vulva and croup relax. The tail-head may become more prominent a few days prior to foaling.

The mare may become anxious and restless. She may appear to be colicky. She may kick at her belly, pace, lie down and get up, look or bite at her flanks, and sweat. She may frequently raise her tail and urinate. Keep in mind that colic remains a possibility. If such behavior is prolonged for more than an hour or two without progress towards foaling, contact your veterinarian.

### **Three Stages of Labor:**

**Stage one** begins with the onset of contractions and generally last 1-2 hours. The fetal membranes may become visible at the mare's vulva. When the sac breaks, signaled by a rush of fluid, stage one ends.

**Stage two** is the actual expulsion of the foal. This phase moves relatively quickly. If it takes more than 30 minutes for the mare to deliver, there could be a problem. Call your veterinarian immediately. If labor seems to be progressing, wait and watch. It is usually best to allow the mare to foal undisturbed and unassisted. Even in a normal delivery, the mare may stand up, lie down, and roll several times in an effort to properly position the foal for delivery.

Normal presentation of the foal resembles a diving position, With front feet first, one slightly ahead of the other, Hooves down, followed closely by the nose, head, neck, and shoulders and hindquarter. If you notice hoof soles up ,the foal may be backwards or upside down, and you should call your veterinarian immediately. Unless it is a dire emergency, do not try to pull foal. If the foal has a backwards presentation, and you find it necessary, never pull with anything more than your own

muscle power and pull only during a contraction. (when the mare is straining) Improper pulling risks damage to the mare's reproductive tract, injury to the foal, and premature separation of the umbilical cord which will deprive the foal of oxygen.

**Stage three** begins after delivery and is when the placenta (afterbirth) is expelled. Most placentas are passed within 1-3 hours after the foal is delivered. If the placenta is not passed within 3 hours, call your vet. A retained placenta can cause serious problems including massive infection and laminitis. After the placenta is delivered, examine it to make sure it is intact. It will be Y shaped with only the hole through which the foal emerged.

### **After Care**

Allow the foal time to break the fetal membranes. Once the foal breaks through, be sure it is breathing. It is not recommended to cut or break the umbilical cord. If it has not broken during delivery it will usually break when the mare or foal gets up. The cord should break at a site approximately one inch from the foal's abdomen, where the cord's diameter is slightly narrower than the remainder of the cord. If it is necessary to manually separate the cord, it should be held firmly on either side of the intended break site, then twisted and pulled to separate. Never cut the cord! Twisting and pulling of the cord stimulate closure of the umbilical vessels and reduce the likelihood of hemorrhage from the cord stump. If bleeding persists following cord separation, pressure can be applied to the stump for several minutes by squeezing with a thumb and finger. Treat the foal's umbilical cord with an iodine solution soon after the cord breaks and for several days thereafter to prevent bacterial infection. The foal should also be inoculated as soon after birth as possible with a tetanus anti-toxin vaccine.

The foal should rise within 30 minutes following its birth. If the mare exhibits aggressive or non-accepting behavior towards the foal, it should be removed and be reintroduced with the mare under restraint. The foal should nurse within two hours of birth. If the foal has not nursed within 3 hours, call your vet. The foal should pass meconium. (first sticky dark stool) within 12 hours of birth. If not an enema may be needed.

It is essential that the foal receive an adequate supply of colostrum (first milk) that provides important antibodies to prevent disease until its own immune system kicks in. They must receive colostrum within the first 8-12 hours of life in order to absorb the antibodies. If the foal is too weak to nurse, it may be necessary to milk the mare and give to the foal via stomach tube. We now can check through a simple blood test, whether or not the foal has appropriate levels of IgG antibodies. This must be done between 18-24 hours of age. If levels are inadequate, we can institute treatment for Failure of Passive Transfer (FPT).

It is always good to have your vet do a postpartum examination of both the mare and foal, as well as the placenta.