

### FOAL MANAGEMENT: The Critical First Two Days

#### Key Points

- ➔ The highest rate of death for horses is in the first 2 days of life
- ➔ The key to managing your foal through this period is Preparation, Problem recognition and Prompt intervention (3Ps)
- ➔ Have a veterinarian examine your foal within 12-24 hours of birth
- ➔ The biggest killer of foals relates to infection
- ➔ Make sure your foal gets colostrum
- ➔ Make sure your veterinarian gives your foal plasma (stock some yourself)

The highest death rate for horses is in the first two days following birth so it is a critical period. Experienced owners and veterinarians describe three things that can dramatically increase your foal's chance of survival.

1. Preparation
  2. Problem recognition
  3. Prompt intervention
- (the three Ps of young foal management)



#### 1.) PREPARATION

To avoid the potential for panic should something go wrong it is best to be well prepared. A number of things can be performed before, during and immediately after birth.

##### Before Birth

- Identify high risk mares and provide appropriate veterinary care during pregnancy
- Vaccinate (5th, 7th, 9th month and 30 days prior to birth) and worm the mare
- Provide good nutrition to the mare (avoid fescue)
- Prepare a foal emergency kit (see below)
- Clean the stalls and use clean bedding materials (not sawdust)
- Install a foal (birthing) monitor
- Understand how to perform foal CPR (close off one nostril and breathe into the other ensuring that the lungs inflate)
- Prepare a frozen colostrum bank, or the easier option
- Have frozen plasma on stock
- Observe the mare for colostrum leakage and vaginal discharge before foaling (signs of placentitis)
- Wash down the mare's hindquarters and udder before delivery

### During Birth

- Be unobtrusively present and observant during the birth process
- Observe for “red bag” delivery (an emergency)
- Keep and weigh the placenta (normal is 10% of foal weight – approximately 5kg)

### Following Birth

- Call your veterinarian to ensure the foal is examined within 12-24 hours of birth
- Wash down the mare’s hindquarters and udder before suckling
- Observe foal for colostrum ingestion, or the easier option
- Ensure the veterinarian administers a litre of plasma
- Observe to see if it has passed its meconium, if not perform an enema
- Leave umbilicus intact for as long as possible. If is usually broken by the foal attempting to stand. If you must break it pull the cord apart while holding close to the abdomen or cut it 6 inches (15 cm) from the foal with scissors
- Turn out the mare and foal for one hour per day increasing per day. By 10-12 days the mare and foal can run with other mares and foals.

## **2.) PROBLEM RECOGNITION**

The key to problem recognition is having an understanding what is normal.

The following tables provide a general guideline to normal and abnormal foal signs in the first 48 hours.

## **3.) PROMPT INTERVENTION**

Once a problem has been identified it is always best to err on the side of caution and intervene quickly. Having an emergency foal kit available will help, as will a routine examination by your veterinarian within the first 12-24 hours of birth. It is also important to know that the biggest cause of death in foals is related to infection – through wounds, trauma, injuries and failure of passive transfer. Foals are born with an immune system that is largely a “blank slate” incapable of fighting infection and they absolutely must have colostrum, or if that fails, intravenous plasma until their own immune system matures. Colostrum provides essential infection-fighting antibodies, and administration of plasma, high in antibody content and other infection-fighting agents, provides extra insurance and peace of mind.

## Normal Foal Signs

| Sign                | Normal   |
|---------------------|--|
| Breathing           | Within 30 seconds of birth   |
| Standing            | Within one hour of birth (some heavy breeds are slower)                        |
| Suckling            | Within two hours of birth  |
| Pulse rate          | 130/minute in first hour. 95/minute up to 48 hours (at rest)                   |
| Respiratory rate    | 70/minute in first 10 minutes. 35/minute for first 48 hours (at rest).         |
| Passing of meconium | Black, dry & tarry stools within 12 - 24 hours of birth and following suckling |
| Nursing frequency   | 3-5 times per hour   |
| Placental weight    | 10% of foal weight (average is 5kg)  |
| Behaviour           | Alert, active, suckling  |
| Urinating           | Straw coloured within 12 hours and every time it suckles                       |

## Abnormal Foal Signs

| Sign                   | What it <u>might</u> mean                                     |
|------------------------|---|
| Milk coming from nose  | Cleft palate, risk of pneumonia, too much milk in one session |
| Orange fluid from nose | Meconium aspiration, risk of pneumonia                        |
| Behavioural changes    | Dummy foal (lack of oxygen during birth)                      |
| Milk on face           | Not nursing   |
| Yellow gums            | Neonatal isoerythrolysis, jaundice                            |
| Brick red gums         | Septicaemia   |
| Eyes sunken or teary   | Dehydration, malnutrition or an eye problem                   |
| Swollen joints         | Infection, septicaemia  |
| Bloat                  | Colic   |
| Weak or lethargic      | Sick, septicaemia   |
| Urine from umbilicus   | Patent urachus  |
| Abdominal enlargement  | Ruptured bladder  |
| Arched back            | Straining to defecate, meconium retention                     |
| Sunk back              | Straining to urinate  |
| Pain on breathing      | Potential broken ribs   |
| Black eye              | Scleral bleeding from a difficult birth                       |

## Emergency Foaling Kit Contents

| Item  | Use  |
|---|--|
| Umbilical tape / clamp                          | Tie the umbilicus if it is bleeding          |
| Antiseptic navel dip (not neat iodine)          | Twice daily immersion of the umbilical stump |
| Large syringe with the end cut off and reversed | Obtain colostrum from the mare               |
| Small syringe or bottle with nipple             | Administer colostrum to the foal             |
| Examination gloves                              | Handling umbilicus and placenta              |
| Large plastic bag with tie                      | For keeping the placenta                     |
| Antibiotics                                     | For administration twice daily for 3 days    |
| Enema materials-warm soapy water and catheter   | Prevention of retained meconium              |
| Towels  | Drying the foal                              |
| Clean containers                                | Collection of colostrum                      |
| Bucket of warm water                            | Cleaning of mare's perineum and legs         |
| Elasticised bandage                             | Tying up the placenta off the mare's hocks   |
| Frozen colostrum                                | Administration to foal                       |
| Frozen plasma                                   | Administration to foal                       |
| Scales  | To weigh the placenta                        |
| K-Y   | Lubrication for enema                        |