

EQUIPLAS[®]

Licensed Equine Plasma Products

FOAL MANAGEMENT: Infectious Diarrhoea

Most foals will show clinical signs of diarrhoea within the first two months of life. It is generally mild, transient, and not contagious or life-threatening. However, in some cases it can be rapidly fatal, infectious, highly contagious and disrupt day-to-day operations of the farm. It is therefore important to have appropriate management practices in place to limit the potentially devastating effects of infectious diarrhoea in foals.



Foals with clinical signs of diarrhoea are not hard to diagnose. However, diarrhoea can be diagnosed prior to such signs and good management practices can be put in place to limit the effects of infectious diarrhoea.

The keys to management of infectious foal diarrhoea are:

1. Prevention
2. Early detection
3. Early veterinary attention
4. Isolation
5. Disinfection and hygiene
6. Traffic control

The best preventative measures involve:

- The use of hyperimmune plasma in foals during the first few days of life and again at three to four weeks of age,
- Vaccination and worming of the mare,
- Worming of the foal in the first two months, and
- Implementation of strict hygiene, cleanliness and quarantine protocols.

Early detection largely involves determining whether the cause is infectious or non-infectious. Infectious foals will often show other clinical signs prior to the development of diarrhoea including nursing abnormalities, fever ($>39^{\circ}\text{C}$ or 102°F) and depression. Nursing abnormalities include signs such as milk on the foal's face, a swollen and painful udder, flies around the udder, and a disinterest in suckling. Keeping a close eye on foals in the first few weeks of life and recognising abnormal behaviour is therefore critical with respect to both early detection and intervention.

Foals that are not suckling, or are depressed, or have a temperature need prompt veterinary attention.

Foals with infectious diarrhoea need to be isolated in a separate stall with protective clothing worn by vets and handlers prior to entering the stall and used only for that stall. Any equipment should also only be used for that stall unless it is disinfected between uses. In contact foals should not be moved, especially to locations where non-contact foals are. Never spread contaminated faeces onto paddocks.

Because rotavirus is the cause of most infectious diarrhoea, phenolic disinfectant compounds are the best to use, especially since they have been demonstrated to be effective in the presence of organic matter and against both viruses and bacteria. The most important part of disinfection is thorough cleaning of surfaces with a detergent prior to application of the antiseptic. There are readily available guidelines on the internet on how, when, and the frequency of effective stable disinfection. It is mostly hard work! Personal hygiene is also important which includes the appropriate use of protective clothing and regular hand washing.

Traffic control means limiting the number of people dealing with sick foals, treating sick foals last, and limiting horse movement around the farm. Each farm will have a different approach to limiting horse movement. However, grouping horses according to how they are used (e.g. mares, weanlings, those in training), keeping them in separate paddocks and barns, and individuals in the same stall as much as possible are common methods of reducing movement. Visiting horses should be quarantined for at least two weeks and pregnant mares should be brought on to the farm at least 30 days prior to foaling to allow the mare's immune system to become accustomed to resident pathogens.

In summary, managing infectious foal diarrhoea revolves around the principles of reducing environmental pathogen load, limiting exposure of foals to pathogens, ensuring foals are immunocompetent, recognising clinical signs early and acting on them, maintenance of optimum immune status in the foal by strategic use of plasma transfusions, and isolation of affected and in-contact foals.

Good items to always have on hand include:

1. Frozen hyperimmune plasma (Equiplas or Equiplas R to give your foals the best start!; see www.foalsbeststart.com),
2. Over-the-counter vaccines,
3. A thermometer,
4. A phenol-based disinfectant (e.g. In North America, Tek-Trol[®] or 1-Stroke Environ[®]; in Australia, Biogram[®] or Phensol[®]),
5. Pepto-Bismol[®] (USA) or ScourBan or Peptosyl (Australia),
6. A petroleum-based ointment/gel (for preventing skin scalding on the hind quarters by loose faeces),
7. Oral rehydration fluids (e.g. 0.9 grams salt in 100mL water, Lectade[®], Vytrate[®]).

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