



## **FOAL DIARRHEA**

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A majority of foals will exhibit diarrhea at some time within the first 2 months of life. In most cases, the diarrhea is mild, transient, not contagious to other foals and not life threatening. However, in some instances, diarrhea can be contagious, severe and possibly even fatal.

Non-infectious diarrhea occurs most commonly during the first 2 weeks after birth as foals are beginning to establish their normal complement of intestinal microorganisms. This transient physiologic condition has been termed 'foal heat diarrhea' because it occurs at approximately the same time as the mare is first returning to estrus after foaling. Contrary to popular belief, foal heat diarrhea is not associated with hormonal changes in the mare or alterations in the composition of her milk. The condition occurs after the foal begins to eat solid food and ingests fecal material from the mare. Ingestion of feces, termed coprophagy, is a natural or instinctual behavior for a young foal and is how the normal gut flora and fauna is acquired.

The typical foal heat diarrhea is self-limiting and not contagious. Affected foals are bright and alert, continue to nurse and do not have a fever. Additional causes of non-infectious diarrhea in foals include lactose intolerance, over feeding, ingestion of sand, and administration of certain antibiotics.

The most common infectious cause of diarrhea in foals is rotavirus. This viral disease is highly contagious and often affects multiple foals in a barn or on a farm. The incubation period, or time interval between exposure and onset of clinical signs, is between 3 and 10 days. Affected foals may have a mild to moderate fever and are often depressed and not nursing well. Foals with rotavirus may become dehydrated rapidly due to decreased fluid intake (i.e. not nursing) and increased fluid output (i.e. watery stool). A clinical diagnosis can be confirmed by detecting the presence of virus in feces submitted to a diagnostic laboratory.

The incidence of rotavirus infection can be reduced on farms by isolating affected foals, strict attention to hygiene and disinfecting stalls and equipment. Mares may be vaccinated at 8, 9 and 10 months of pregnancy to increase antibody levels in colostrum for passive transfer to the newborn foal.

Other infectious causes of diarrhea in foals include salmonella, E. coli, clostridium, rhodococcus and other bacterial or viral organisms.

Management strategies for foals with diarrhea depend on severity, duration and cause. In general, administration of fluids is

one of the most important components of medical therapy. Mild cases may be treated safely and effectively with an oral fluid and electrolyte solution, while more severe cases may require intravenous fluid administration. Intestinal protectants such as bismuth subsalicylate (Pepto-Bismol®), intestinal adsorbents (i.e. Bio-Sponge™) and probiotics are commonly used. Other therapies that may be recommended by a veterinarian include anti-ulcer medications, analgesics, antibiotics and/or intravenous plasma administration.

In summary, non-infectious causes of diarrhea often resolve spontaneously or with minimal medical intervention. Foals that are febrile, depressed, not nursing and/or have a profuse watery or bloody diarrhea should be examined and treated by a veterinarian. Appropriate diagnostic tests, management decisions and medical therapy may be critical in preventing spread of infectious organisms or limiting the severity of illness in affected foals.



**Foal with diarrhea**