

# BABY CALF HEALTH:

## Can We Stop Calf Scours?

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Scours is responsible for almost 61 percent of calf deaths according to the NAHMS study done several years ago. Calf scours or diarrhea is not really a disease but rather the clinical sign of a disease that can have many causes. Bacteria, viruses, protozoa, nutrition or environmental stresses can all cause calf scours.

As with other calf diseases, scours incidence can be directly tied to the calf that did not receive adequate immunity from the cow through the colostrum. Remember that to be protected, the calf must receive an adequate amount of good quality colostrum soon after birth.

Preventing and treating calf scours starts by identifying what the causes are. Make sure the management, including feeding and environment, is not the primary problem. Identification of any infectious organisms involved in the problem is important in designing treatment and prevention strategies. Age of the calf at the time of the scours outbreak is often a good clue as to the “bug” involved but laboratory tests conducted on fecal samples from scouring calves or dead calves may be advisable. Discuss diagnostics with your veterinarian.

Scours associated with *E. coli*, a bacteria, is most common and the earliest to develop. Newborn calves can die from *E. coli* infection before the diarrhea actually develops. Prevention in-

volves cleanliness and vaccination of cows followed by proper colostrum management. There also are several antibody preparations available that can be given to the calf by mouth at birth and prior to infection.

Another bacteria, *Salmonella*, can infect the young calf from day one through four to six weeks. This can be a very deadly bacteria. Often, the calves are infected from cows that are carriers. Colostrum or milk from infected cows can also be a source of infection.

A third bacterial agent that is gaining more attention lately is *Clostridium perfringens*. This same organism is linked to the “hemorrhagic enteritis” that is blamed for killing cows. Calves are usually over a week of age before bloating and diarrhea, sometimes bloody, occurs with *Clostridial* infections.

The two viral agents most commonly associated with calf scours are Rotavirus and Corona viruses. These two viruses usually are associated with diarrhea in calves less than one week old and up to three weeks of age. These two are not nearly as deadly as the *E. coli* or *Salmonella*. Prevention is again through cow vaccination and colostrum, or through antibody preparations given soon after birth. There is also a Rota/Corona oral vaccine for the calf. This must be given right after birth and before any colostrum.

Two protozoan diseases that are a constant danger to calves are *Coccidia* and *Cryptosporidia*. Both are seen in calves older than ten days of age. They are diseases of poor sanitation, as they are shed in the manure of older calves or the cows. Contamination of feed or milk with manure is enough to infect the young calf. Most calf milk replacers contain a coccidiostat, usually decoquinate. This drug does a good job of controlling coccidia but is not effective against *Cryptosporidia* at label dose. Calves infected with *Cryptosporidia* can be saved with good nursing care. There is no labeled medication for *Cryptosporidia* so prevention is important. *Crypto* is also infectious to people so handle infected calves with care.

Most calves that die as a result of scours actually die of dehydration and electrolyte imbalance. Therefore, the primary response to a scouring calf should be to provide electrolytes as needed in addition to the milk that would normally be fed. Additional specific treatment may be possible once an infectious agent has been identified. Treatment details for scouring calves will be addressed in another article.

Scours problems are a constant threat to young calves. A good program of proper nutrition, sanitation, and management is necessary to minimize incidence and loss. Remember, prevention will go a long way in preventing treatment.