

Calf Scours—a Practicing Veterinarian's Viewpoint

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Calf scours cause severe economic losses in our practice area every year. The most obvious loss is the death loss of neonatal calves, but often overlooked is the loss of production in reduced weight gains and permanently stunted growth which occurs in some of the calves.

Treatment costs, although economically justifiable in most cases, add considerably to the cost of production.

Preventive programs involving management, sanitation and vaccination, although not cheap, are the least costly method of controlling calf scours.

Causes

The most common organism isolated from souring calves is *Escherichia coli*. The next most common agent is the coronavirus followed by the rotavirus. Other agents implicated are BVD, IBR, Salmonella, coccidia and *Clostridium perfringens*.

Environmental stress, inadequate nutrition and failure to receive colostrum early in life are other important factors in the cause of the problem.

Incidence

The incidence of calf scours may be divided into three groups. Those producers who always have the problem (the severity may vary but it is always there), those producers who sometimes have a problem (highly dependent on environmental conditions) and those producers who never have a problem (regardless of weather conditions).

Treatment

In our practice we check the serum of the majority of the sick baby calves for immune globulins. If there has not been adequate transfer of passive antibodies from the dam's colostrum there is generally a very poor response to treatment.

The single most important element of treatment is fluid balance. The dehydration, electrolyte loss and acidosis must be corrected by oral or parenteral fluids. Severely dehydrated calves are treated intravenously and those which are mildly dehydrated are treated orally. Antibiotics are routinely used. Although their benefit may be somewhat questionable in treatment of scours, they seem to reduce secondary infections, especially pneumonia. Glucose, B-complex vitamins, amino acids and vitamins A and D are also routinely used to give the calf strength and aid in convalescence. Antiserum is also used, particularly if a viral problem is suspected. Nursing care is probably second only to fluids in importance as a therapy. The calf should be separated from the cow and maintained on an electrolyte source so that it does not receive milk for 24-48 hours, or longer if necessary. Also, it should have a clean, dry and warm shelter. Even with treatment many calves never completely recover and become "poor doers."

Prevention

Management is an important factor in the prevention of scours. Producers need to reduce the stress to which the baby calf is exposed. They need to make sure the cow herd is on an adequate level of nutrition. They also need to reduce infectious agents through sanitation. The most useful preventative available to the cattleman is a good vaccination program. I am presently recommending immunizing the open cow with IBR-BVD in the spring and the pregnant cow in the fall and again in the spring with rota and corona vaccine. Some herds also use *Clostridium perfringens* C and D vaccine. I will probably be adding an *Escherichia coli* vaccine to the program when it becomes available. The only way a calf is going to benefit from these vaccinations is if it gets colostrum early in life.

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