The Veterinary Link

 $b\gamma$ BOB LARSON, professor of production medicine, Kansas State University



Coccidiosis in cattle (and other species) is caused by a small parasite that invades the cells of the intestinal tract, and if enough intestinal cells are damaged, diarrhea can result. Although almost all types of animals can be infected with one or more species of coccidia organisms, specific coccidia

species do not spread from one type of animal to another. In other words, cattle cannot be infected with coccidia from other types of animals.

Symptoms

Coccidia organisms are very common, and most cattle are infected with at least a small number. However, the organism will cause noticeable disease when conditions allow the coccidia to multiply rapidly, such as in situations with excessive mud, crowding, and weather or shipping stress. The signs of coccidiosis are: diarrhea containing blood, a rough hair coat, poor weight gain, and rectal straining or prolapse. Although other diseases will cause a bloody diarrhea, coccidiosis should be suspected if blood is found in the feces.

Coccidiosis causes problems most commonly in young animals between 3 weeks and yearling age. Adult animals that remain in the herd are usually immune to the local coccidia. Bringing in new cattle can cause an outbreak of coccidiosis in the new animals when they are exposed to the local coccidia — or the new animals may bring in a new species of coccidia and cause an outbreak in the original herd.

Coccidiosis causes problems most commonly in young animals between 3 weeks and yearling age.

The most common losses due to coccidiosis are due to mild infections of young, growing cattle that do not cause noticeable diarrhea, but that cause cattle to require more feed to maintain or gain weight than unaffected cattle. Mild cases that involve a few days of watery feces without noticeable blood, where the cattle do not become obviously depressed or off-feed, are also common.

Severe cases with a week or more of bloody diarrhea can lead to a fever, animals going off-feed, and being depressed and dehydrated. Some severely affected cattle can die, while severely affected animals that survive are unlikely to catch up to herdmates that were not affected.

Treatment and prevention

Your veterinarian is most likely to diagnose coccidiosis after examining cattle with bloody diarrhea and ruling out other problems. The organism can often be detected in high numbers in fecal samples, but this test is not always accurate because intestinal damage can occur before large numbers of coccidia are found in the

October 2009 / **ANGUS BEEF BULLETIN** • 41

S U B S C R I P T I O			
Please enter my subscription for 12 issues of the Angus Journal.		Name	
A NICI IC	50 for one year (U.S.)		
ANGUS	_ , , ,	Address	
Journal	\$80 for one year (Canada) (Payable in U.S. funds)		
3201 Frederick Ave.		City	
Saint Joseph, MO 64506-2997			
(816) 383-5220 E-mail: lspire@angusjournal.com	S125 for one year (Foreign) (Payable in U.S. funds)	State	ZIP

feces. In addition, some cattle may have high numbers of coccidia in their feces, but be nearly recovered from the disease and are in much better shape than cattle with few or no organisms earlier in the disease process.

Whenever one or more cattle in a group has obvious signs of coccidiosis, you can assume the rest of the group has been exposed and is likely to be suffering less-obvious losses.

A number of treatments are available for cattle suffering from obvious coccidiosis, and affected cattle should be separated from the group so they can be kept warm and comfortable while being individually treated with fluids to correct dehydration and with drugs to kill the organism. Whenever one or more cattle in a group has obvious signs of coccidiosis, you can assume the rest of the group has been exposed and is likely to be suffering less-obvious losses.

To prevent coccidiosis, good animal husbandry practices to improve sanitation and reduce stress are important. The organism survives very well in the environment, and it is considered impossible to completely remove it from areas where cattle live.

Young animals should be kept in as dry and clean an environment as possible; and feed and water should be kept off the ground as much as possible to minimize fecal contamination. Weaning, shipping and surgeries (castration and dehorning) should be done in ways to limit stress.

In addition to management strategies, a number of drugs such as ionophores, decoquinate or amprolium can be delivered by feed or water to groups of cattle at risk for coccidiosis for a month or longer to minimize the risk of severe disease. A month of treatment is necessary to break the life cycle of the organism.

As with many diseases, good sanitation and animal husbandry are important to prevent and control coccidiosis. In addition, your veterinarian can recommend products to treat affected cattle and preventatives that can be used during periods of highest risk for the disease.

