CANADIAN CATTLEMEN'S ASSOCIATION
#215, 6715 - 8th Street N.E.
Calgary, Alberta T2E 7H7
Tel: (403) 275-8558
Fax: (403) 274-5686
602, 150 Metcalfe Street
Ottawa, Ontario K2P 1P1
Tel: (613) 233-9375
Fax: (613) 233-2860

Frequently Asked Questions about Anaplasmosis

Prepared by the Canadian Cattlemen's Association

1. **What is anaplasmosis?**
Anaplasmosis is an infectious blood disease of ruminants, including cattle, bison, sheep, goats, elk, and deer. It is sometimes called gallsickness. It's spread primarily by biting ticks and flies. It can also be spread from animal to animal on equipment that comes in contact with blood, such as hypodermic needles, dehorning and castration equipment, etc. Anaplasmosis does not affect humans.

2. **How common is anaplasmosis?**
Anaplasmosis is rare in Canada because the biting ticks and flies that spread the disease are not active during Canadian winters. Anaplasmosis is common in cattle populations in warm climates, including Australia and southern Asia. It's also found in the United States, especially in the warmer climate States, including the southeastern States and California.

3. How serious a threat is this disease to Canadian cattle?
This disease is not considered a widespread threat because the vectors that spread the disease, biting ticks and flies, do not over-winter in Canada.

Eighteen bison in northern Saskatchewan tested positive for anaplasmosis in 2000. It remains undetermined where the animals came in contact with the disease. In 1996, five domestic cattle were destroyed after they came in contact with anaplasmosis-carrying animals imported into the country illegally. There was no spread beyond the initial premise.

4. What are the symptoms of anaplasmosis in cattle?
Calves get only mild symptoms with few deaths resulting. In yearlings, symptoms are more severe but most animals recover. Adult cattle are the most severely affected, with death rates from 20 to 50 percent in animals that are left untreated.

Symptoms appear 4 to 6 weeks after exposure to the disease. The earliest symptoms are depression, lack of appetite, and elevated temperature. Lactating cows show a rapid fall in milk production. As the disease progresses, anaemia develops as red blood cells are destroyed by the infective ricketssial organism (rickettsiae are midway in size and biology between viruses and bacteria). The animal becomes dehydrated and constipated. Yellowing of the mucus membranes, for example around the eyes, may be observed. Handling or moving affected animals may cause death from respiratory distress due to the lack of red blood cells for carrying oxygen.

Anaplasmosis is treatable with antibiotics. Animals that recover naturally, without treatment with antibiotics, may remain carriers of the disease.

5. Is there a vaccine to prevent anaplasmosis?

A vaccine is available in countries where anaplasmosis is common. The vaccine is not used in Canada because animals that are vaccinated will test positive for the disease, masking the actual presence of the disease. The vaccine, a live vaccine, can actually induce the disease in some susceptible adult cattle. There is also no need to vaccinate in Canada as the disease is rare and our winter weather prevents it from spreading.

6. What happens if the disease is diagnosed in Canada?

In Canada, anaplasmosis is considered a foreign animal disease. It is a Reportable Disease, meaning any cases diagnosed must be immediately reported to the Canadian Food Inspection Agency (CFIA). Confirmation of anaplasmosis is made through a blood test. If a diagnosis were to be made, CFIA would place quarantine on the premise where the animal was found. All livestock known to be in contact with the infected animal would also be tested. All animals testing positive would be destroyed and the owner compensated under the Health of Animals Act.