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Johne's Disease

Johne's (pronounced "Yoh-nees") disease is becoming more commonly seen in Iowa beef cattle herds in the last few years. Some studies have estimated the prevalence of Johne's to be less than 9% in beef cattle herds. However, testing for Johne's is sporadic and the real prevalence is unknown. The number of positive cases identified by the Iowa State University Veterinary Diagnostic Laboratory have increased dramatically in the last few years. In 2010, only 65 positive cases were identified out of all the samples submitted. In fall of 2016 over 200 cases were identified, with more results still to be accumulated. Long considered a disease primarily of dairy cattle, it is becoming a more common problem for beef cow-calf herds.

Johne's disease is caused by the bacteria called Mycobacterium paratuberculosis, which is in the same species as the bacteria that causes tuberculosis. Mycobacteria are very hardy bacteria that survive a long time and grow relatively slow. Cattle can be infected as calves and not show signs of disease until they are 3 to 5 years old. There is no treatment for infected cattle. In Iowa Johne's is a reportable disease although the control program is voluntary.

There are several factors associated with increasing prevalence of Johne's in Iowa. The primary factor is the increasing movement of cattle between operations. Expanding herds commonly bring outside cattle into their operation that could be carrying the disease but not showing any clinical signs leading to exposure to the resident cattle. Even closed herds are at risk as Johne's has been diagnosed on seedstock operations that could potentially be selling young infected bulls. Although diagnostic tests are available they are not perfect and carrier animals can be missed. Because the bacteria grows so slowly young animals such as yearling bulls or heifers could be infected but do not have high enough levels of the bacteria to be detected, even with the most sensitive tests. With Johne's disease a positive test is usually positive but a negative test may just mean it is not positive yet.

The other major factor leading to increased prevalence of Johne's is the increased concentration of cattle in Iowa. The bacteria grows in the intestinal tract leading to chronic diarrhea and weight loss and calves are infected by being exposed to fecal material from positive cows. For the past 100 years beef producers haven't worried too much about the disease because cattle on pasture do not transmit the disease very easily. However, as pasture has become scarce Iowa herds have become more concentrated particularly around calving when young calves are most at risk of becoming infected.

To control Johne's, new additions to your herd should be tested, although we may miss some cases, it is the only way to currently have any capability of preventing from infecting your herd. Any mature animal that develops chronic diarrhea or weight loss should be tested even if you are just going to cull the animal. Identifying the disease before multiple animals are infected will decrease the economic impact to your herd. If you identify a case in a purchased animal, notify the original owner as they may not know that they have a problem in their herd. If you suspect Johne's, contact your veterinarian so testing and control programs can be implemented.