

## **Johne's Disease: An Important Biosecurity Threat to Your Herd**

Mel Pence DVM, MS, PAS, Diplomate ABVP (beef cattle)  
University of Georgia, College of Veterinary Medicine

### **Is Johne's disease a problem I need to be concerned about?**

There are several levels of concern about Johne's disease. The first level is production cost. About 8% of beef cattle herds in the US are infected with Johne's, and number of infected herds is increasing. This increase in occurrence of the disease is largely due to the fact that Johne's is not a reportable or quarantinable disease in most states and infected cattle are free to be sold as breeding stock. The cost of Johne's disease to the cattle industry in the US is estimated to be about 1.5 billion dollars. Economic costs to the beef cattle industry include loss of genetics, decreased production due to lowered milk production, decreased breeding cattle cull weight, increased culling rates, decreased fertility, and costs of diagnostic testing. Consequently, this disease has a potential to negatively impact the income from your beef herd.

A major concern of our industry is the possible link between human Crohn's disease and Johne's disease in cattle. There is no definitive scientific evidence that the same organism that causes Johne's in cattle will cause Crohn's disease in people but the evidence is starting to point that way. What really matters is the perception of consumers. If there is a perceived link then, the beef industry needs to address the problem.

### **Can't I just vaccinate my herd for Johne's disease and be safe?**

There is a vaccine for Johne's disease. It has been used in a few other states. Use of this vaccine has not reduced the level of Johne's infection. Herds that have vaccinated have just as many positive cattle as those herds that do not vaccinate if they both have the same level of Johne's control management. It is difficult to test vaccinated cattle and determine if they are infected or not.

### **What is Johne's disease anyway?**

The bacterium that causes Johne's disease is related to the bacteria that cause TB. They are both infections that generally take a long time to develop and are difficult to treat. Johne's infects the fetus in the uterus or a calf shortly after birth. The pathogen can be shed in the feces or the milk. In heavily infected herds, the disease also may infect older cattle. It takes several years (2 – 10) before an infected animal shows signs of the disease. What you might see is a two year old or older cow that is eating normally but has a chronic (long-standing) diarrhea. These cattle are easily confused with wormy cattle but they do not respond to worm medications. They get progressively thinner and stop eating over a period of several weeks. There is no treatment for Johne's and eventually they will die from the disease.

### **So how do I protect my herd against Johne's disease?**

Most herds do not currently have a Johne's disease problem and should concentrate their efforts on keeping Johne's disease out of the herd. Like most

cattle diseases, it is usually brought onto a farm when new cattle are purchased (i. e., you may pay good money to get Johne's). When you buy cows or your next bull make sure you get a health paper and request that the veterinarian include a statement on the health paper, that the herd of origin has not had a diagnosis or clinical signs of Johne's disease in the last five years. If you have cows that have a chronic diarrhea, start out eating but over a period of weeks get thinner and stop eating, you and your veterinarian should determine the cause of the problem. In the future, state or national programs may help identify herds that are free of Johne's disease and breeding stock could be purchased from those herds that are Johne's disease free. New testing procedures for Johne's disease will soon be available, thereby facilitating the process of identifying Johne's disease free herds.