

Are You Monitoring for Johne's Disease?

By Kris Ringwall
Extension Beef Specialist
NDSU Extension Service



One of the most important aspects of beef management is herd health. From a practical point of view our efforts fall into several workable categories.

Most producers simply peruse the herd and make a general assessment of the herd's well-being. Are the cows doing what is normal? Most herds follow a general pattern of daily activity, usually centered around a feeding schedule. An astute producer will quickly assess the general well-being of the herd while doing daily chores.

Additionally, producers vaccinate for common diseases which have a high risk of herd exposure. At the North Dakota State University Dickinson Research Extension Center, cows are vaccinated with Scourguard 3KC prior to calving and Preg-Guard 9 prior to breeding. Calves are vaccinated with Ultrabac 7, Cattlemaster 4 and One Shot Ultra7 at appropriate times during their development. Replacement heifers are vaccinated for brucellosis by a local veterinarian.

Vaccinations challenge the immune system of the animal to prepare it in advance for exposure to naturally occurring micro-organisms bent on making it sick. We can't see the organisms, but they are there, every day, seeking a home in one of our not-so-lucky cows or calves, or any living creature, for that matter. Of course the immune system that is triggered by the vaccinations prepares for the coming onslaught, and generally wins the battle for the fortunate cow or calf.

Occasionally, a massive attack will overwhelm even the best-prepared animal, requiring additional assistance in the form of antibiotics to help the immune system overcome the illness. In the most unfortunate situation, the organisms win and the cow or calf lose. The bottom line, although no guarantee, is that a well-fed and vaccinated cow or calf will live to see another day.

Cattle may also receive injections to control internal parasites or regulate reproduction. None of these, however, trigger an immune response resulting in increased protection against pending disease.

The more troublesome diseases are those we don't have a vaccine for. The most difficult herd health scenario is managing diseases like Johne's.

Johne's has no early distinguishable symptoms but could be at work within your herd, causing slow and chronic problems that become hard to detect in the day-to-day assessment. Symptoms of Johne's, like weight loss, diarrhea and poor performance, show up later in life. Think of termites in your house. You may not know they are there until a major portion of a wall caves in some day.

Good herd health programs need to monitor both the obvious and the not-so-obvious diseases.

Currently we are blood testing mature cows at the Dickinson Research Extension Center for the hidden presence of Johne's. To date, 402 cows have been tested with 398 testing negative and 4 suspect, due to an initial positive test result. Two suspect cows, 4395 and 0346, have had additional blood and fecal material resubmitted. The additional blood work tested negative, indicating the earlier tests were false positives. However, we will await negative fecal cultures before declaring the cows negative. We'll resubmit blood and fecal samples for cows 3374 and 9025. Again, good aggressive herd health programs position a cow herd for the future.

What you don't measure, you can't manage, so give your local veterinarian a call and get involved. Eliminate Johne's, before Johne's eliminates you. The old saying, "An ounce of prevention is worth a pound of cure," was never truer than in herd health management.

Your comments are always welcome at www.BeefTalk.com. For more information, contact the North Dakota Beef Cattle Improvement Association, 1133 State Avenue, Dickinson, ND 58601 or go to www.CHAPS2000.com on the Internet. In correspondence about this column, refer to BT0086.

Status of Johne's Disease Evaluation NDSU Dickinson Research Extension Center

Number of cows tested	402
Number of cows negative	398
Number of suspect cows	4
Number of confirmed positive cows	0

Status of Johne's Suspect Cows

Cow	Symptoms	Current Classification	Fecal Sample Status
4395	none	re-bled — false positive	culturing
0346	none	re-bled — false positive	culturing
3374	none	re-bled — pending	pending
9025	none	re-bled — pending	pending