



# Dairy Newsletter

www.akey.com \* DairyCattleNutrition.com

Oct/Nov 2007

## Controlling Johne's Disease

The maternity area is the place most calves are likely to get their first exposure to the organism causing Johne's (*Mycobacterium avium* subspecies *paratuberculosis* or MAP). The sooner they can be removed to a clean place, the less the risk of them ingesting it and becoming infected. Likewise, the greater the environmental burden of MAP in the maternity area, the more likely the calf is to get an infectious dose before it is removed from the cow. Some veterinarians are now using environmental sampling of the maternity area as a kind of "report card" for overall hygiene and the risk to the calf. These samples of bedding can be taken at periodic intervals, perhaps quarterly, to assess overall contamination and the need to improve hygiene of that area. Research has shown that the udder, belly, feet, and legs of cows can be heavily contaminated with MAP and that the dry cow area may be a source of contamination for the maternity area, even if a cow about to calve is placed in a freshly cleaned and bedded calving stall. The dry cow area can also be sampled to assess this risk. Work we have done so far suggests that five samples for culture can give a producer and the practitioner a glimpse of the level of contamination of maternity or dry cow areas and the need for corrective action.

Pooling of fecal samples will not likely be useful to producers who already know they have a serious problem with Johne's disease; however, this approach can be useful to assess strings of cows in large dairy herds, and it can be useful in estimating the overall prevalence of infection in some herds that do not already have an idea of the prevalence or which have just found out they have an infected cow. Currently, samples can be collected by producers and sent to the laboratory, through their herd veterinarian, for pooling and culture. This may be attractive for

owners of small beef herds where the cows are not handled frequently. Pooled sample results can be used to determine which groups of five animals may have "heavy" MAP shedders. Further testing can identify these animals for culling or segregation. Pooling could also be used to assess infection in groups of purchased animals. Pooling in groups of five substantially reduces the cost of testing and can provide valuable information to the herd owner.

We are currently assessing the usefulness of culturing heifers to see if it is possible to identify MAP-infected animals at a younger age and redirect them to options other than the milking herd. In addition, Ohio and other states are currently evaluating some additional approaches to individual animal tests that may be more sensitive than ELISA and less costly than culture. However, in the short term, producers can still use testing strategies that will help them manage this disease. They don't have to be costly. Consult with your veterinarian for options that may be useful in your herd.

*-Dr. William Shalaw, Extension Veterinarian, Ohio State*

## Grain Marketing for Buyers

For at least the next year, the market will remain very tight, and much more attention than usual will be paid to deferred futures contract prices, such as harvest '08 and '09. From a marketing standpoint, I expect that this attention will be very clearly felt soon after harvest this year when attention turns to '08 harvest. Because no crops will have ample inventories by the end of the 07/08 marketing year, prices for '08 harvest will stay strong, which should create a "floor" for the 2007 crop prices, but the large number of bushels being harvested and stored this fall will nonetheless create heavy pressure on cash prices.

Therefore, feed-buying opportunities will be best in November and December, when

storage pressure will be highest. But by mid-January at the latest, the market will likely start the process of allocating acres for '08 plantings, a process that will probably see corn futures running up to \$4.15/bu and soybeans to \$9.50/bu. After the March 31 report, all prices, but especially soybeans, should see price declines lasting into June, when weather worries begin.

*-Dr. Matthew Roberts, Ohio State*

## **Iodine Availability for Dipping Navels**

Completing one of the critical steps in newborn calf care will now take a little more planning. Having a constant supply of 7% tincture of iodine on the farm is more important than it was less than a month ago as the product is no longer available at local or through mail-order farm supply outlets.

**Question:** Why is 7% tincture of iodine no longer available at retail stores or through catalogs for dipping calf navels?

**Answer:** Creative illegal drug manufacturers and unscrupulous livestock supply dealers conspired to use 7% iodine to produce iodine crystals which were then used to produce methamphetamines. As a result, the United States Drug Enforcement Agency (DEA) moved iodine, previously designated as a list 2 chemical, to a list 1 chemical. For us, that means that the DEA will now regulate sales of all products containing more than 2.2% iodine.

**Question:** Can I still purchase 7% iodine to dip calf navels?

**Answer:** Yes, but it can only be purchased through a vendor who is registered to handle controlled products. It is likely that your veterinarian is registered to handle other DEA controlled substances and may also carry 7% iodine for their clients. It will mean extra paperwork for the veterinarian's business. Talk to them before your current supply runs out!

**Question:** So, why bother dipping navels at all?

**Answer:** An important step in newborn calf care is dipping the calf's umbilical cord in a 7% tincture of iodine as soon after birth as

possible. A tincture contains alcohol. The alcohol provides drying action, while the iodine has disinfectant properties. It is a long-held belief that this management practice plays a large role in preventing navel ill and other infections.

**Question:** Is there a good substitute for 7% tincture of iodine?

**Answer:** Possibly, but right now anyone who tells you anything specific is probably guessing. A quick search of past and current research turns up no studies on this topic specifically

**Question:** Why not use one of the iodine-based teat dips?

**Answer:** We do know teat dips are not effective as navel dips. Iodine-based teat dips contain 1% iodine or less. They also don't contain the alcohols comparable to an iodine tincture. Tinctures containing 2% iodine will still be available over the counter. A short-term patch would be to use these for several days in a row until the umbilical cord is completely dried. Realistically, most farms are doing well to get a navel dipped once in 7% iodine, let alone re-dipping two or three more times.

Dipping navels in 7% tincture of iodine is an important management practice, helping to minimize illness and death loss in dairy calves. Keeping an adequate supply on hand will take a little more planning since the product is now a USDEA List 1 chemical. Don't use this change as an excuse not to dip calf navels. Eventually, a calf or calves will fall victim to septicemia or navel ill. Don't let your calves be victims of illegal drugs.

*-Dianne Shemaker, Ohio State*

*Ohio State University information was reproduced with their permission.*

**THIS NEWSLETTER IS SENT TO YOU  
COMPLIMENTS OF:**