

NAHMS Dairy 2002 Released

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Center for Animal Health Monitoring (CAHM) has released Part I: Reference of Dairy Health and Management in the United States, 2002, an 82-page document describing health management for cows and heifers as well as biosecurity practices. Data were collected from 2,461 producers in 21 major dairy states representing 82.8 percent of U.S. dairy operations and 85.5 percent of the U.S. dairy cows. The document can be read online, or downloaded from:

http://www.aphis.usda.gov/vs/ceah/cahm/Dairy_Cattle/dairy.htm

Since most people involved with day to day activities on dairies would not be inclined to read results of the Dairy 2002 study from cover to cover, a few of the highlights are presented here.

Biosecurity

Purchased cattle provide a great opportunity to introduce disease into an existing herd. Forty-five percent of all operations reported bringing new additions into their herd, but less than 40% of these operations implemented a quarantine for any of the new arrivals. As operation size increased, the number of farms reporting herd additions increased, which is what one would expect as herds grow larger from external expansion. Even in those herds that reported quarantining new additions, usually less than half of the animals purchased were actually quarantined. Since the stress associated with moving animals from one herd to another can cause exacerbation of infectious diseases, isolation of newly purchased and stressed animals is critical to prevent a herd outbreak.

Animals selected for purchase can be managed to decrease the risk of introducing disease to the existing herd. Vaccination of purchased cattle prior to arrival can decrease disease in those cattle, as well as decrease the transfer of disease to the existing herd. Slightly less than half of all operations reported vaccinating incoming cattle, prior to arrival, for Brucellosis, BVD, IBR, Leptospirosis, or Neospora. Testing of incoming cattle for certain diseases can also decrease the chances of a major herd outbreak. Over 75% of all operations reported not testing purchased cattle for Brucellosis, Johne's, BVD, or TB prior to bringing them onto the farm.

Evaluating new additions for udder health is also critical in the prevention of outbreaks of contagious mastitis. The recommendation has been to obtain a bulk tank SCC and culture from the herd being purchased and, ideally individual cow SCC and cultures. Although approximately 27% of operations that purchased dairy cows obtained individual cow SCC, less than 15% of operations had any culture information on purchased animals. Larger herds (>500 cows) were more likely to obtain udder health information compared to herds less than 500 cows. It is surprising with all the press coverage on expansion and biosecurity that 75% of expanding farms are doing little or nothing to protect their herd from infectious and costly diseases.

Dairy Heifer Deaths

Dairy operations lose a significant number of calves before weaning as compared to beef operations. Overall, 8.7% of dairy heifers born alive died prior to weaning, compared to 3.5% of beef calves as reported in NAHMS Beef '97. The time frame from birth to weaning is much shorter for dairy heifers than for beef calves; however, dairy heifer death loss is almost 2.5 times as great in one fourth the time frame. Large dairy operations had the lowest calf deaths losses at 7.7%.

Although the Dairy 2002 study did not ask dairy producers about calves born dead, the Beef '97 estimates suggest that half of the total calf losses to weaning are calves born dead. If this is extrapolated to the dairy industry, between 15 and 20% of all calves do not live until weaning; this also is true with the dairies that ILM has been tracking. The numbers represented by the Dairy 2002 study were only heifer calves that arguably receive more attention than their male counterparts, suggesting that overall death loss was probably even higher. Management practices that reduce calf loss during or immediately subsequent to calving need to be reviewed and improved to decrease calf deaths. The dairy industry can not accept this level of calf death loss from an economic or from an animal welfare standpoint.

The majority (62%) of dairy heifer calf deaths prior to weaning were caused by diarrhea or other digestive problems, followed by respiratory problems at 21%. Combined, these two causes of death accounted for more than 80% of deaths in heifer calves born alive. Since diarrhea and respiratory problems are often infectious diseases that can be managed by proper nutrition and environment, there is an opportunity to make a significant impact in reducing death loss.

Heifer Prewaning Feeding Practices

Waste milk was fed to all or a portion of dairy heifer calves on 87.2% of operations. Although waste milk is a relatively inexpensive source of nutrition for suckling calves, it does not come without costs. Diseases such as Johne's, Mycoplasma and BLV can all be transmitted through raw waste milk. While pasteurization of waste milk can significantly reduce or eliminate calf exposure to these pathogens, only 1% of all operations reported feeding pasteurized waste milk to calves, while 11.3% of large herds used pasteurization techniques. Pasteurization of waste milk can be a cost effective approach to reducing disease in calves.

Medicated milk-replacer was used on 55.7% of operations with Oxytetracycline combined with neomycin as the most common medication. Although more expensive than waste milk, feeding medicated milk-replacers to calves reduces the potential for diseases transmitted through raw milk and is also intended to decrease the incidence of diarrhea and pneumonia in unweaned calves. Prophylactic use of antibiotics in this situation is being more closely scrutinized by the government and medical communities as a potential cause of bacterial resistance. Experts believe that it is only a matter of time before all prophylactic use of antibiotics is banned from food animals. This would make the management of young calves even more critical in preventing illness and deaths in unweaned calves.

For questions regarding the Dairy 2002 study, contact Dr. Jason Lombard or Dr. Brian McCluskey @ (970)494-7000.