

## USDA Releases Interpretive Report on Johne's Disease on U.S. Dairies

The U.S. Department of Agriculture's National Animal Health Monitoring System (NAHMS) has released an interpretive report titled *Johne's Disease on U.S. Dairy Operations, 2002*. The report was compiled from data collected during the NAHMS' Dairy 2002 study and takes an in-depth look at Johne's disease on U.S. dairies and associated risk factors. Copies of the report have been shipped to producers and other industry members across the country.

In 1991, NAHMS conducted the National Dairy Heifer Evaluation Project (NDHEP). Through this project, baseline information on heifer health, illnesses and management practices, as well as prevalence estimates for *Cryptosporidium*, *Escherichia coli* 0157:H7 and *Salmonella*, was published.

In 1996, the NAHMS' Dairy '96 study built on the results of the NDHEP. Objectives of the Dairy '96 study included estimating the national prevalence of *Mycobacterium avium subspecies paratuberculosis* (MAP), the causative agent of Johne's disease; bovine leukosis virus; and fecal shedding of *E. coli* 0157 and *Salmonella* in adult dairy cows.

The NAHMS' Dairy 2002 study continued to address issues important to the U.S. dairy industry by describing changes in baseline dairy cattle health and management practices; strategies to prevent Johne's disease; waste handling systems; the preparedness of producers to respond to foreign animal diseases; and evaluating management factors associated with the presence of certain food safety pathogens. Here are a few highlights from *Johne's Disease on U.S. Dairy Operations, 2002*:

- Nearly half of operations (47.8 percent) had ever observed at least one cow in their herd with clinical signs consistent with Johne's disease.
- During the 12 months prior to the 2002 study interview, a higher percentage of large and medium operations (38.3 percent and 39.5 percent, respectively) performed any testing for Johne's disease, compared to 20.4 percent of small operations. Approximately one in four operations (25.7 percent) tested for Johne's disease.

- Nearly 7 out of 10 operations (67.6 percent) that tested for Johne's disease used only a serum ELISA to test at least one cow during the 12 months prior to the 2002 study interview. Only 5.7 percent used fecal culture exclusively to diagnose Johne's disease. Approximately one-fourth of operations (26.7 percent) used both fecal culture and serum ELISA to test for Johne's disease.
- The percentage of operations participating in Johne's disease certification, control or herd-status programs increased since the Dairy '96 study. However, there was no difference in program participation by herd size within each study year.
- Exposure of newborn calves to fecal pathogens can be minimized by providing separate maternity housing. In 2002, 53.1 percent of operations provided separate maternity housing compared to 45.4 percent of operations in 1996.
- Pooling colostrum from more than one cow increases the risk of spreading milk-borne pathogens to more than one calf. Overall, 27.0 percent of operations pooled colostrum. A much higher percentage of large operations (70.6 percent) pooled colostrum than did medium operations (37.4 percent) and small operations (22.1 percent).
- Five different management areas were assessed for the study's risk assessment component. Calving area management had the highest average risk score across all herd sizes and regions and accounted for almost 50 percent of the total risk score.
- The majority of cows (86.7 percent) classified as high MAP shedders (based on fecal culture) tested either serum-ELISA positive or strong positive, while 76.9 percent were detected by milk ELISA. Both serum and milk ELISA's ability to detect infected animals decreased as shedding level decreased.

**Note to Stakeholders:** Stakeholder announcements and other APHIS information are available on the Internet. Go to the APHIS home page at <http://www.aphis.usda.gov> and click on the "News" button. For additional information on this topic, contact Suzan Holl (301) 734-6464 or [suzan.holl@aphis.usda.gov](mailto:suzan.holl@aphis.usda.gov)

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