

Dairy '96

The National Animal Health Monitoring System and dairy producers representing 83% of the nation's milk cows are cooperating to conduct Dairy '96. This study is designed to improve understanding of Johne's disease, salmonellosis, hairy foot warts, and Neospora abortion. Dairy industry members were consulted to help define the study objectives (see insert) Representatives of the National Agricultural Statistics Service (NASS) began contacting Dairy '96 producers in January to complete preliminary questionnaires on management practices and herd health. This data will be released later in the spring. From February 20 through mid-May, state and federal Veterinary Medical Officers will visit producers who have agreed to continue the program. This phase includes completion of another questionnaire and collection of fecal, blood, and water specimens to help fulfill the study objectives.

What is the National Animal Health Monitoring System?

In the mid-1970's, the National Academy of Science sparked the USDA's Animal and Plant Health Inspection Service (APHIS) to reassess its responsibilities toward the animal agriculture industry in light of modern information needs. Producers, veterinarians, academia, educators, and government policy makers alike needed scientifically-sound and statistically-valid, national information to move the industry forward.

APHIS established NAHMS to collect and provide information that complements other sources. NAHMS began on the farm to test the theory and methods of data collection necessary for national studies. The earliest projects included both dairy and beef pilot studies in several states, including Colorado. Producer participation is voluntary to encourage high data quality and information from individual operations is kept confidential. The need for statistically-valid results led planners to the USDA's National Agricultural Statistics Service (NASS). NASS provides NAHMS with statistical knowledge of U.S. operations and food-animal populations. This enables data collection from a sample of participants, and analysts use the information to make estimates on broader populations.

Before designing a study, NAHMS conducts a needs assessment of critical information gaps involving the industry and related groups. Then, an optimal study design is chosen to collect the necessary data. Sampling incorporates questionnaires and biologic sample collection. Industry subject matter specialists review NAHMS information prior to release.

How are NAHMS data used?

NAHMS data continually help policy makers and researchers address disease problems by providing scientifically-based information on management practices, animal health, and interrelationships between these factors. NAHMS information helped policy makers dispel public condemnation of food-animal agriculture following human disease outbreaks in the early 1990's. Prevalence of *Escherichia coli* 0157:H7 and *Cryptosporidium* in dairy calves were proactively identified through the 1991-92

NAHMS National Dairy Heifer Evaluation Project (NDHEP). Results of the NDEHP were used by officials addressing the recent outbreak of bovine viral diarrhea (BVD) in dairy herds. The 1993 and 1994 NAHMS beef cow/calf and feedlot results were used to demonstrate to beef producers and related organizations how changes in branding and injection practices can help minimize financial losses. Organizations, such as the American Association of Bovine Practitioners, and private businesses, such as Hoechst Roussel Agri-Vet Company and private practitioners, distribute NAHMS materials as educational tools to members, agricultural consultants, and clients. Federal and State government supervisors in many areas distribute information to increase the knowledge base of their representatives and to enhance services to their clients. NAHMS provides United States' international trading partners with a clearly defined and available monitoring system to enhance global marketing efforts.

For more information on NAHMS or to receive Dairy '96 information as it becomes available, contact the Centers for Epidemiology & Animal Health; USDA:APHIS:VS, Attn. NAHMS; 555 South Howes; Fort Collins, CO 80521; (970) 490-7800; Internet: NAHMS_info@aphis.usda.gov

Objectives of Dairy '96:

- 1) Estimate national and regional prevalence of specific pathogens in dairy cattle, including Mycobacterium paratuberculosis (Johne's disease), bovine leukosis virus, and Neospora sp.
- 2) Describe baseline dairy cattle health and management practices used on U.S. dairy operations.
- 3) Describe management practices used to assure production of quality dairy.
- 4) Describe the incidence of digital dermatitis (hairy heel warts) on U.S. dairy.
- 5) Evaluate factors related to Salmonella and E. coli 0157:H7 in dairy cattle.
- 6) Provide a profile of animal waste handling systems used on U.S. dairy operations.