

Highlights of Dairy 2007 Part I: Reference of Dairy Cattle Health and Management Practices in the United States, 2007

In 2007, the National Animal Health Monitoring System (NAHMS) conducted a study of U.S. Dairy Operations. The Dairy 2007 study collected data on dairy health and management practices from 17 of the Nation's major dairy States.* These States represented 79.5 percent of U.S. dairy operations and 82.5 percent of U.S. dairy cows. Part 1: Reference of Dairy Cattle Health and Management Practices in the United States, 2007 is the first in a series of reports containing national information from the NAHMS Dairy 2007 study and contains information collected from 2,194 dairy operations.

Released October 2007, the report provides participants, industry, and animal-health officials with information on the Nation's dairy population that will serve as a basis for education, service, and research. The following are highlights excerpted from Part I of the Dairy 2007 study.

Operation type

- The majority of dairy operations (63.9 percent) were conventional operations, and the majority of cows (82.2 percent) were on these operations. Grazing and organic operations accounted for only 3.1 and 1.7 percent of operations, respectively, and together represented less than 3.0 percent of cows.

Productivity

- Producers were asked to report their rolling herd average (RHA) milk production (the amount of milk [lb/cow] produced by the average cow during the last 12 months). The average of this reported number across all operations—referred to as the operation average—was 19,175 lb/cow.
- Operations with on-farm computer systems had higher operation average RHAs compared to operations using off-farm computers or no computers.
- Overall, the average age at first calving was 25.2 months. Large operations reported the earliest average age for heifers at first calving at 24.0 months (table 1).

*California, Idaho, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, New Mexico, New York, Ohio, Pennsylvania, Texas, Vermont, Virginia, Wisconsin, and Washington

Table 1. Average Age of Heifers at First Calving, by Herd Size

Operation Average Age (Months)			
Herd Size (Number of Cows)			
Small (Fewer than 100)	Medium (100-499)	Large (500 or More)	All Operations
Average	Average	Average	Average
25.4	24.8	24.0	25.2

- The operation average dry period on medium operations (56.3 days) was about 3 days shorter than the average on large operations (59.6 days). The overall average days dry was 57.8 days.
- For all operations, the average calving interval was 13.2 months. No differences were observed in calving intervals across herd sizes.

Heifer management

- Nearly all operations (96.5 percent) had at least some heifers that were born and raised on the operation. Almost 9 of 10 heifers (87.4 percent) were born and raised on the operation. Although 4.7 percent of operations had heifers born on the operation but raised elsewhere, these operations accounted for 11.5 percent of all heifers (table 2).

Table 2. Percentage of Operations and Percentage of Heifers, by Source of Heifers

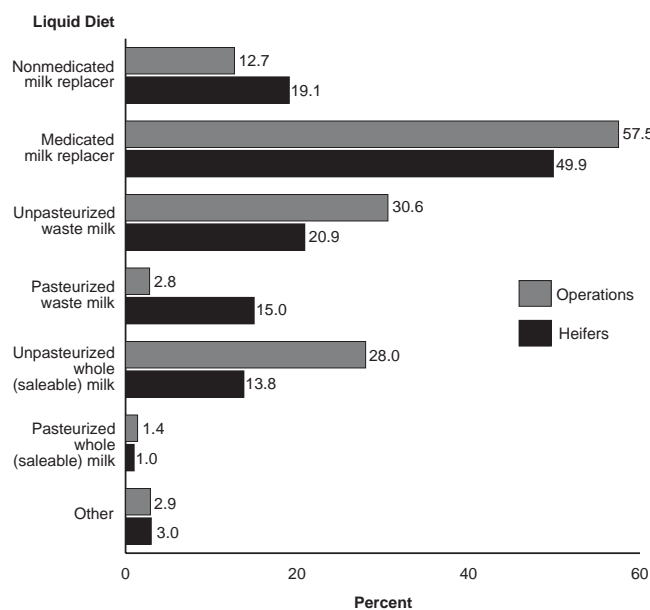
Heifer Source	Percent Operations	Percent Heifers*
Born and raised on operation	96.5	87.4
Born on operation raised off operation	4.7	11.5
Born off operation	6.6	1.1
Total		100.0

*As a percentage of January 1, 2007, heifer inventory

- Unweaned heifer deaths during 2006 accounted for the highest percentage of deaths among the animal classes at 7.8 percent, while 5.7 percent of cows and 1.8 percent of weaned heifers died.

- More than half the operations (55.9 percent) removed newborn heifer calves immediately after calving. These operations accounted for 65.6 percent of all heifer calves.
- Overall, medicated milk replacer was fed on more than half of all operations (57.5 percent). Similar percentages of operations fed unpasteurized waste milk and unpasteurized whole (saleable) milk (30.6 and 28.0 percent, respectively) (figure 1).

Figure 1. Percentage of Operations that Fed a Liquid Diet to Heifers Any Time Prior to Weaning During 2006, and Percentage of Heifers that Received a Liquid Diet Any Time Prior to Weaning, by Type of Liquid Diet



- The operation average age of heifers at weaning was 8.2 weeks, with large operations weaning calves at an older age (9.1 weeks) than medium and small operations (7.9 and 8.2 weeks, respectively).
- Preventive practices were commonly used for heifers: 94.6 percent of operations administered at least one preventive practice to heifers, and 94.6 percent of heifers were on these operations. More than 60 percent of operations vaccinated heifers against bovine viral diarrhea (BVD), infectious bovine rhinotracheitis (IBR), parainfluenza Type 3 (PI3), bovine respiratory syncytial virus (BRSV), and leptospirosis.
- During 2006, almost 9 of 10 cows and heifers (86.0 percent) delivered a calf that was alive at 48 hours. Of the calves born during 2006, 93.5 percent were alive at 48 hours, while 6.5 percent were either born dead or died prior to 48 hours of age. Almost one in five calves (17.2 percent) needed assistance during delivery.

Cow management

- The majority of operations (60.3 percent) had a tie stall/stanchion milking facility. Although just 39.5 percent of operations used parlors, 78.2 percent of cows were on operations that milked in parlors.

- Adverse reactions, which include a lump or swelling at the injection site, hives, abortion, collapse, or death, can occur following the administration of preventive or therapeutic products. Only 12.7 percent of operations had at least one adverse reaction on their operation during 2006.
- Almost all operations (95.3 percent) used some preventive practice for cows.
- A total of 15.2 percent of operations used bST on 17.2 percent of cows. As herd size increased so did the percentage of operations that used bST, ranging from 9.1 percent of small operations to 42.7 percent of large operations.
- The three most prevalent diseases reported in cows were clinical mastitis, lameness, and infertility problems (16.5, 14.0, and 12.9 percent of cows, respectively).
- Of permanently removed cows, 26.3 percent were removed for reproductive problems and 23.0 percent for udder or mastitis problems.

Biosecurity

- Almost 4 of 10 operations (38.9 percent) brought at least 1 new addition onto the operation during 2006. Approximately one in eight operations brought on bred dairy heifers, lactating dairy cows, or dairy bulls (12.2, 13.8, and 12.5 percent, respectively).
- Less than 50 percent of operations that brought cattle onto the operation during 2006 required vaccination of new additions prior to arrival. Cattle were required to be vaccinated against BVD, IBR, and leptospirosis on 42.9, 41.9, and 38.8 percent of all operations, respectively.

Visit the NAHMS Web site at: <http://nahms.aphis.usda.gov> for a complete copy of Part 1: Reference of Dairy Cattle Health and Management Practices in the United States, 2007.

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