

Survey of Dairy Producer Attitudes and Practices Regarding Antibiotic Use and Residue Avoidance

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Abstract

A random sampling of 809 dairy herds were surveyed by telephone to determine their attitudes, awareness, and practices regarding dairy quality assurance (QA). Some very predictable and some very surprising results will be discussed. Implications for dairy practitioners and their clients also will be discussed in this presentation.

Introduction

Consumer and ag industry concerns for safety and quality of foods has markedly increased in recent years. The National Milk Producers Federation and the American Veterinary Medical Association have developed a 10-point Milk and Dairy Beef Quality Assurance Program to minimize the risk of antibiotic residues in milk or meat from dairy farms.

The current study consisted of two surveys designed to assess dairy producer attitudes, awareness and farm practices related to antibiotic use and residue avoidance. The surveys were conducted as part of a USDA-funded project, Residue Avoidance: Evaluation of Dairy Quality Assurance Programs and Approach to Total Quality Management. Participating institutions: Virginia State University and Polytechnic Institute, University of Wisconsin, University of California-Davis, Cornell University, University of Illinois, University of Florida, Kansas State University, University of Nebraska, and Michigan State University.

Objectives of the two surveys were to obtain information about dairy producers regarding the Milk and Dairy-Beef Quality Assurance Program (DQAP), including attitudes, awareness and dairy management practices associated with antibiotic use and residue avoidance.

Methods and Materials

I. Telephone survey—Approximately 160 dairy farms were randomly selected in each of five states (California, New York, Pennsylvania, Virginia, Wisconsin) from a list frame of all dairy farms selling milk in each of those states. The five states were cooperating in a joint extension project to evaluate educa-

tional needs relative to Dairy Quality Assurance and represented a cross section of major dairy-producing areas of the U.S. A survey instrument was developed by Penn State personnel to provide baseline information on which to build a nationwide educational program for dairy producers and ag professionals.

The survey was conducted in March and April 1993 by a professional survey organization, Wisconsin Survey Research Laboratory. Data is currently being analyzed at Cornell University.

II. Farm Survey—Of the 160 farms surveyed by phone in each of the five participating states, 10 percent were randomly selected for a follow-up survey on the farm. The purpose of this survey was to validate some of the information gathered in the phone survey by re-asking selected questions. The on-farm interviewer also recorded observations on specific farm practices or conditions that could have impact on the risk of residue violations. The on-farm survey instrument was developed at Penn State and data is being analyzed at Cornell University.

Results

Analysis of survey findings will be discussed. Preliminary results show:

- A. Producer attitudes
- 91 percent believe that antibiotics in milk is a serious concern of consumers.
 - 94 percent believe that antibiotics in milk is a serious concern of dairy producers.
 - 93 percent believe that antibiotics in milk is a serious concern personally.
 - 87 percent think that their farm is **not** likely to have a residue violation within the
 - 53 percent think that other dairy producers they know are **not** likely to have a residue violation within the next year.

- B. Producer awareness
- 81 percent were familiar with dairy industry efforts to reduce residue risks.
 - 43 percent were aware of the 10-point Milk and Dairy Beef QA Program. The most frequent sources of information on the 10-point program were dairy magazines and milk receivers, followed by veterinarians and extension publications.
 - 22 percent had received the 10-point program booklet, primarily from their milk receiver.
 - 4 percent have completed the booklet (i.e. signed by both producer and veterinarian).
- C. Producer practices
- 73 percent had discussed antibiotic use with their veterinarian during the past 3 months.
 - 71 percent had tested milk or urine for antibiotic residues within the past 12 months.
 - 74 percent visibly marked all antibiotics treated cows.
 - 54 percent kept a written record of all antibiotic treatments.
 - 79 percent kept drugs in clearly marked "lactating" or "non-lactating" drug storage areas.

A variety of specific management situations were mentioned by the surveyed producers as most-likely causes of a residue violation on their farm, the most frequently mentioned were:

- milking personnel not paying attention or too rushed
- new, or different, milking personnel

Conclusions

A random sampling of 809 dairy producers in 5 states were surveyed by telephone. Preliminary data from these 5 states (California, New York, Pennsylvania, Virginia, Wisconsin) indicates broad awareness of quality assurance issues but minimal implementation of an NMPF/AVMA-sponsored, 10-point QA program. Greater than 90 percent of surveyed producers considered antibiotics in milk and meat a serious concern of consumers and producers. A similar percentage personally considered antibiotics in milk a serious concern. About 80 percent of surveyed producers were aware of industry-sponsored QA programs, although only 43 percent were aware of the specific 10-point Dairy QA pro-

gram. Further, only 22 percent had a 10-point DQA booklet and only 4 percent had completed the booklet.

Recommended producer practices for residue avoidance varied widely in implementation rate, even though all surveyed practices have been widely recommended during the past two years. Percentage of dairy producers implementing residue testing, treated-animal identification, treated-animal records, and proper drug labeling were 71 percent, 74 percent, 54 percent, and 75 percent, respectively.

Although 53 percent of surveyed producers considered their neighboring producers not likely to have a residue violation in the next year, a much higher percentage felt their own farm not likely to have a violation (87 percent).

Ten percent of phone survey farms were also surveyed on-farm to validate telephone survey findings and to evaluate on-farm management practices related to QA. Implementation of residue avoidance procedures varied with herd size, but overall, recommended management practices were underutilized.

Information about dairy QA assurance has been widely disseminated, but producer implementation of recommended practices is only fair, and completion of the 10-point program is very low. Milk receivers, veterinarians, and extension educators have a major task to facilitate implementation of this program.

Cooperating Institutions

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- Cornell University: P. M. Sears, D. Wilson
- Penn State University: L. J. Hutchinson, N. E. Kiernan, W. M. Sischo
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- University of Wisconsin: A. N. Bringe, S. Price, L. Baumann

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