



The Milk Lines



November 2001

ANTIBIOTIC RESIDUES

MEETINGS

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REMINDER

Antibiotic Residues

*John H. Kirk, DVM, MPVM
Veterinary Medicine Extension
School of Veterinary Medicine
University of California, Davis/Tulare*

In a recent *Dairy Today* issue (October 2001), there was a very complete listing of reasons for antibiotic residues in milk and meat of dairy cows. Almost every situation was mentioned that might result in a residue. Here is a list of the reasons that seem to apply particularly to our western dairy herds.

Milk Residues

1. Accidentally milked treated cow into bulk tank.
2. Milked a dry-treated cow into tank.
3. Milked a recently purchased lactating cow into tank that had been treated.
4. Treated cows milked last but pipeline not diverted from bulk tank.
5. Extra label treatment – shipped milk or cow too soon.
6. Milk put in tank before withdrawal period had ended.

Meat Residues

1. Not following label directions for correct treatment.

2. Not following the label directions for the appropriate withdrawal period.
3. Treatment not recorded as a written record – shipped the cow too soon.
4. Poor animal identification.
5. Long-term residue following treatment as a calf.
6. Extra label drug use.

There is no argument that these situations actually happen and result in residues to both milk and meat. However, the root of the problem is deeper than this. These seem to be merely symptoms of the root problems. Here are some of the underlying problems leading to these reasons for residues:

1. The herdsmen or persons in charge of treating cows are not working closely with their herd veterinarian to maintain a current plan for treatments. There should be a written protocol for each treatment listing the signs of the disease or condition to be treated, what drug(s) should be used, how much should be given and by what route, how often should it be repeated and the maximum number of treatments, and the milk and meat withdrawal times. All this should be written out in great detail leaving no doubt as to what must be done each and every time. There should also be a written treatment record or computerized record where each treatment will be recorded and the withdrawal dates calculated. The written records should be monitored periodically to detect shifts or drift in the treatments made by

workers and to determine the effectiveness of the treatments. Feedback from the workers is important to make sure the treatment protocols are practical and workable on the dairy.

2. Lack of a continuing, routine training program for new and experienced employees is another underlying cause of residues. The herdsmen and veterinarian should be actively involved in worker training. Each worker that is allowed to treat animals should be required to attend as a term of their employment. Workers should be trained in the treatment protocols and how to enter treatments into the records. The workers should get a short course in recognition of the common diseases they may encounter on the dairy.
3. A very limited number of well-trained employees should be allowed to treat animals. When lots of workers treat cows, invariably multiple treatments result leading to residues. The fewer treaters there are, the better for most dairies. If possible, only one person should do all the antibiotic treatments. Each of these workers must attend the training sessions and be very familiar with the treatment protocols. Each person that is allowed to treat animals with antibiotics should know how to read drug labels and calculate the appropriate dose.
4. Once the veterinarian and dairy herdsmen develop a treatment protocol for the common diseases they have on the dairy, it will not be necessary to use extra-label treatments except in rare situations. If they are used more than occasionally, they can be defined in the treatment records. By avoiding extra-label treatments, much of the doubt about withdrawal times can be removed.

In summary, there are many reasons why residues occur as noted in the *Dairy Today* article. In reality, however, these are only symptoms of the true problem. Lack of written treatment protocols and record keeping systems, inadequate employee training, too many workers treating cows and extra-label treatments are the true problems. By dealing with these issues residues can be avoided.

MEETINGS

10th Annual Farm Supervisor Workshop in Spanish

December 11-12, 2001

Kearney Agricultural Center
9240 South Riverbend Ave., Parlier

Information: Yolanda Morillo

559-456-7285 or

e-mail ymurillo@ucdavis.edu

2001 California Alfalfa Symposium

December 12-13, 2001

Doubletree Hotel, Modesto

Information: Nikki Picanco

530-752-0700 or e-mail

ndpicanco@ucdavis.edu

South Valley Dairy Day

January 30, 2002

Edison AgTAC, South Laspina, Tulare
(program in next month's newsletter)

Information: 559-685-3309

Mid-Valley Dairy Day

January 31, 2002

Stanislaus County Ag Center
Crows Landing and Service Rd., Modesto
(same program as Tulare meeting)

Information: 209-525-6800

The following articles were provided by Tom Shultz, UCCE Farm Advisor Emeritus.

USDA

Representatives from the USDA will visit local dairies in January to conduct a survey for "Dairy 2002," a national study of health and health management practices on U.S. dairies. The study is conducted by the USDA's National Animal Health Monitoring System (NAHMS), and is a continuation of studies that address priority issues of the U.S. dairy industry.

Previous studies include heifer health issues in 1991 and national estimates of Johnes's disease and fecal shedding of E. coli 0157 and salmonella in 1996. Other ongoing studies include foot wart incidence and a profile of waste handling systems of dairies.

The "Dairy 2002" study objectives are:

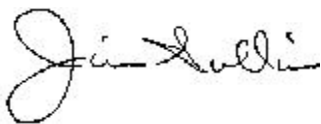
1. Describe management strategies to reduce Johnes's.
2. Evaluate management factors associated with key food safety pathogens in dairy cattle.
3. Describe preparedness of U.S. dairy producers to threats of foreign animal diseases.
4. Describe biosecurity practices and trends on dairy operations.
5. Add to baseline of animal health management practices on U.S. dairies since the 1996 study.
6. Continue description of waste handling systems.
7. Describe U.S. dairy producers' attitudes towards and uses of animal identification.

Data collectors from the National Agricultural Statistics Service (NASS) will begin the study by contacting about 4,000 dairies in 21 states. These farms will represent 83% of U.S. herds and 85% of

cows. Data will be summarized on a regional and national basis. As always, participation is voluntary and data sources will be confidential. Selected producers, at their option, may receive an additional contact by a Veterinary Medical Officer from the Animal & Plant Health Inspection Service (APHIS:VS) who will explain a second phase of the study. For more information, contact Dr. Brian McClusky at (970) 490-7803, or NAHMSweb@aphis.usda.gov, or www.aphis.usda.gov/vs/ceah/cahm.

Reminder

U.S. government intelligence reports suggest terrorists would have little trouble entering stockyards, feedlots or farms. Unannounced federal agents entered many facilities without challenge. They advise producers should tighten security by checking credentials of unknown persons on the facility and immediately report any intruders to authorities. The office of Homeland Security, headed by Gov. Tom Ridge, will have a veterinarian assigned to it to respond to threats of America's food supply. This veterinarian will provide advice if bioterrorism is committed against farms, food processors, and food distributors. No sense crying wolf, but it would be wise to form a biosecurity protocol for your facility along with family and employees, veterinarian and sheriff's office. Refer to the last "Milklines" for related information on anthrax and biosecurity topics.



Jim Sullins
County Director