DAIRY VETERINARY NEWSLETTER

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Dairy Animal Welfare Audits

I first began to hear about dairy animal welfare standards when I was a resident at Michigan State University, about 6 years after graduating from veterinary school. This issue has been somewhat divisive within the dairy and other livestock animal industries for many years. Some people who make statements about farm animal welfare have little knowledge of animal care or behavior, or of the physical danger that even normally placid dairy cattle - let alone beef cattle or swine - can pose to humans. They also often have no appreciation for the long hours and the frustration that sometimes come from working around livestock. However, the vast majority of dairy producers, veterinarians, and other members of the dairy industry I know have always been committed to animal welfare, and receptive to some of the changes that have come along since I began riding with veterinarians over 40 years ago. And of course today, with cell phones and social media, many producers and other members of the dairy industry realize that any appearance of inhumane treatment of farm animals may become public knowledge and is not well tolerated by society.

When I worked in the milk quality and udder health program at Cornell, we had some VHS tapes about dairy cattle handling in the early 1990s that were somewhat ridiculous. They showed obviously staged scenes of "beating on" cattle (to be clear, they showed students slowly swinging rakes or brooms and barely touching cows at all to simulate hitting the cows without actually doing so) to get cattle up or to move them. They had narrated scenes with no farm audio of people pretending to "yell at" cows to get them in and out of milking parlors, etc. Alternative ways of working with cows were also shown in the videos. During this same time period I recall a friendly dairy producer explaining to me that they had always loved their cows and would only ever hit a cow with a hollow plastic pipe, not with metal or wood. I was struck by the fact that some of our clients would view these tapes and make comments such as, "This is just what my brother and I need, we grew up used to being too rough with the cows", etc. Then it occurred to me that several vets and dairy farmers I had first worked with 15 years earlier had taught me that you don't have to get right up near dairy cattle or do a lot of hitting and clapping to get them to move. I learned how to try to get down cows, including after treatment with calcium for milk fever (yes we still did that) or toxic mastitis for example, to get up without using electric prods, etc. But not everyone in the dairy industry who was hearing for the first time about animal welfare, animal rights activists, camcorders, etc. during the early 1990s had ever learned from their mentors and examples about how to be anything but loud and aggressive around cattle. What was their "normal" would not pass today. My first dairy cattle judging class in 1976 had a student TA who was famously known as a great dairy cattle show person and judge; the instructor praised him frequently. However, if a cow that he was leading with a halter acted up, he would punch them in the snout. The course instructor never said anything at all about this at that time. Times have clearly changed for the better, and animal welfare is an issue that is not going away.

Not too long ago I was on a farm with a veterinarian who does quite a bit of animal welfare audit work. They made me aware of more details about the FARM® audit system, and their opinion that more dairy animal welfare standards will be coming. I decided to try to find out more about some of the animal welfare guidelines and services in place. As always, the content of this newsletter is not intended to endorse specific brands or companies, but only to convey information.

FARM animal welfare program

This well-known program, Farmers Assuring Responsible Management, is under the auspices of the National Milk Producers Federation (NMPF), and originated in 2009. <u>FARM cites a 2016 study that found that 94.4% of people surveyed were "very concerned about farm animal welfare"</u>. This animal welfare audit system has an impressive list of milk procurement and processing companies as sponsors and users, including those in Utah.

The FARM manual is 138 pages long, and can be found and downloaded online at no charge. One thing that has confused me before is the impression that Validus®, a USDA and ISO certified animal welfare program, was different than FARM. However, Validus provides Third-Party Verification by visiting randomly selected dairy operations that have had FARM audits. The FARM manual states, "There are only two ways to be automatically removed from the FARM Program: (1) refusal to participate in Third-Party Verification, or (2) if willful mistreatment of animals is observed at any time." These Third-Party Verification visits are to "audit the auditing" process and statistically verify the validity of FARM audits. I could find no description of the statistical methods or P value(s) used to determine the validity of FARM audits; I would be interested in how this is statistically analyzed. Again, only a fraction of FARM-audited dairy operations are randomly selected for the Third-Party Verification to monitor the overall auditing process.

There is a long list of feed, water, housing, management, handling, and disease treatment practices for dairy animals of all ages covered in the FARM manual. A few of the interesting details of FARM standards follow:

Milking routine:

- Cows should be moved without excessive vocal or physical interaction, resulting in minimal vocalization from the cows and calm movement in the parlor.
- Animal handlers should walk against the flow of cows coming into the parlor, paying attention to the reaction of the cattle and adjust for balking or stopping. To return to their starting positions, animal handlers should use a path that does not impede the flow of cattle movement.

(Note: There is no language regarding robotic milking or any other milking system other than a milking parlor.)

• The routine includes checking for abnormal milk, and thorough cleaning and drying of the teats. Avoid medical examinations or unpleasant experiences from being associated with the place of milking. Teat ends are periodically inspected to facilitate timely identification of any problems.

(Note: Many milking systems and routines today, especially with automation, do not allow performance of several of these procedures.)

Newborn and milk-fed dairy calves:

- Disbudding/dehorning before 8 weeks of age with pain mitigation provided in accordance with the recommendations of the herd veterinarian.
- All other planned medical procedures, including castration and extra teat removal, are performed at the earliest age possible with pain mitigation provided in accordance with the recommendation of the herd veterinarian.

In recent months I have been told by several veterinarians and others in the dairy industry that meloxicam or some kind of analgesia is "required" when disbudding/dehorning in order to fully meet the guidelines of farm animal welfare audits, but notice the above reference to the discretion of the veterinarian. In my experience, the vast majority of dairy farms disbudding young calves, usually with electric hot-iron dehorners, are not administering analgesics. (A paper by Gottardo et al. in J Dairy Sci, November 2011 reported that a survey of 639 farms showed that 91% of farms used hot-iron dehorning and 90% used no analgesia). It is not evident to me that dairy producers are widely consulting their herd health veterinarian about this, either. I have taken advantage of the opportunity to show students when we visit farms that baby calves disbudded at an early age often show very little if any sign of discomfort; I do not think dehorning young calves is markedly inhumane. Nevertheless, it surprised me that FARM welfare guidelines deferred to the "herd veterinarian" regarding "pain mitigation", and again I am not sure that many farms actually consult with the vet if they do their own dehorning. The AVMA has a 2014 literature review, "Dehorning and Disbudding of

Cattle" and while it does indeed review dehorning and reference policies in many developed countries, it does not actually state methods, analgesia guidelines or the maximum age that calves should be disbudded/dehorned in the U.S.

Willful mistreatment of animals (much of the public as well as the dairy industry thinks of this as a major focus of animal welfare standards):

- Acts that maliciously cause pain, fear, injury or suffering including, but not limited to: needlessly applying any
 type of prod to a sensitive part of the animal (prods are only used when animal or human safety is in jeopardy,
 and as a last resort).
- Malicious hitting or beating of an animal or movement of non-ambulatory cattle in a manner inconsistent with National Dairy FARM Program guidelines (see the next category below).
- Prolonged lack of access to feed and water.
- Inappropriate on-farm slaughter or euthanasia.

Non-ambulatory animals (defined as unable or unwilling to stand and remain recumbent for 12 hours or more):

- In best practice, a non-ambulatory animal has access to clean water (or milk or milk replacer in the case of a pre-weaned calf) and feed at all times.
- The diet of a special-needs animal may need to be adjusted from its healthy counterparts based on its feed intake abilities and special considerations for its illness or injury.
- These animals are also protected from inclement weather in all seasons, including shade provision in summer. (Note: I have attended many conferences in different parts of the Americas where increasingly larger farms with open corrals exist and where hot weather is common, and discussion of shade provision frequently comes up. However, providing shade to down animals in open areas during hot weather is not always easy to do rapidly.)
 - (If the down animals need to be moved) - proper movement, including use of special equipment.
 - Access to feed, water, shelter/shade, isolation from other animals and protection from predators.
 - Prompt medical care.
 - Euthanasia in a timely manner, if warranted.
 - Record of mortalities and causes.

Over many decades, studies - including some referenced previously in this newsletter, and my own experience on many projects and farm visits seeking disease recording - suggest that approximately 45% of cases of disease and/or treatments are recorded on dairy farms; this has not changed much in many years despite tablets, cell phones, etc. However, in my experience, even farms with excellent records do not always attempt to get a diagnosis of why animals died, and often even if death is recorded, the cause may well not be. There are so many things to attend to on dairy farms that diagnosing and recording deaths is often not seen as a priority. However, valuable information about this very important category of losses is very useful.

Administration of vaccines and other injectable products:

- Always follow label instructions for route of administration and dosage (needle size).
- All injections should be given in front of the shoulder slope and in a subcutaneous manner if label permits.

(Note: This recommendation has been in place for over 25 years. However, it can be difficult to follow when cows are in lockup gates or even some designs of treatment chutes. It can result in considerable danger to humans in some circumstances as well, in comparison with injecting cows from the rear.)

• Never straighten a bent needle and use again

(Note: Using burred needles or those that have become as dull as a stump is not even mentioned. I strongly agree that bent, burred or dull needles should be replaced immediately.)

Veterinarian-Client-Patient-Relationship (VCPR) exists when:

- The veterinarian has assumed the responsibility for making medical judgments regarding the health of the patient and the client has agreed to follow the veterinarian's instructions.
- The veterinarian has sufficient knowledge of the patient to initiate at least a general or preliminary diagnosis of the medical condition of the patient. This means that the veterinarian is personally acquainted with the

keeping and care of the patient by virtue of: a. A timely examination of the patient by the veterinarian, or b. Medically appropriate and timely visits by the veterinarian to the operation where the patient is managed.

- The veterinarian is readily available for follow-up evaluation or has arranged for the following:
- a. Veterinary emergency coverage, and b. Continuing care and treatment.
 - The veterinarian provides oversight of treatment, compliance and outcome.
 - Patient records are maintained.

(Note: The VCPR has been a controversial subject ever since I first learned about it. There is no doubt that *some* drug prescribing and/or "consulting" on livestock farms including dairy farms is done without any semblance of a valid VCPR. FDA, USDA and other regulatory bodies refuse to even answer direct questions about VCPR, let alone enforce it. The Veterinary Feed Directive has had important impact on unsupervised dispensing of antibiotics, but as far as a requirement for a VCPR, which was supposed to be one focus of the VFD, little has changed.)

Animal welfare is obviously important for everyone in the dairy industry. We are stewards of the animals and in return for their meat and milk production we know how important excellent care of them is, and that public perception of this is paramount. Welfare guidelines such as FARM will likely continue to evolve.

Please let us know your comments and suggestions for future topics. I can be reached at (435) 760-3731 (Cell), or **David.Wilson@usu.edu**.

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