

Improving animal health and welfare through industry education and quality assurance programs

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Abstract

Veterinarians profess an obligation and oath to uphold the protection of animal health and welfare through the prevention and relief of animal suffering. When caring for animals destined for the food supply, veterinarians practicing on livestock have further responsibilities in food safety and public health. With emerging and ongoing concerns from meat and milk customers and consumers pertaining to animal welfare, veterinarians play a key role in producer and employee education to ensure proper care is provided. Verifying practices are being completed is another step where veterinarians can have a positive impact on everyday animal welfare and the quality of the end product. Producer education is a valuable tool for veterinarians in all sectors of the cattle industry. Industry programs focusing on quality assurance and protocols in areas of animal care and worker safety are integrated into veterinary medicine and the livestock industry already. Learn about these cattle care standards that affect animal health and welfare and how veterinarians can integrate the programs into their practice. Standards from AABP, Beef Quality Assurance (BQA), National Dairy Farmers Assuring Responsible Management (FARM) program, and Calf Care & Quality Assurance (CCQA) will be reviewed.

Key words: welfare, National Dairy FARM Program, Calf Care & Quality Assurance, CCQA, Beef Quality Assurance, BQA, producer education, veterinarian

Introduction

Animal welfare plays an important role in the cattle industry and all of agriculture. Assessing animal welfare and seeking improvements are the responsibility of all cattle caretakers and especially the veterinarian. Several stakeholders are invested in cattle health and welfare – the animals, veterinarians and producers, supply chain, and consumers. Customers and consumers of animal meat and milk products have shown increased interest in how animals are raised and grown.^{7,10} Other groups, such as animal action groups, ask consistently about animal welfare standards in animal agriculture. A proactive solution to these concerns is following industry-led guidelines on animal care and welfare that covers the cattle through all sectors of the industry. Quality assurance programs have become commonplace for all food-producing enterprises as a means to build consumer confidence that their food is ethically and responsibly produced.

For example, according to consumer market research conducted by the National Cattlemen's Beef Association (NCBA) on behalf of the Beef Checkoff, consumer perceptions about beef production are strong overall, with nearly 70% of respondents claiming a positive view on beef.^{7,10} When asked to describe any

concerns related to beef cattle production, of the 52% of respondents who claimed to have a concern, animal welfare was mentioned the most. Only 12% of respondents mentioned the environment as causing a concern, which suggests that consumers are more concerned with animal welfare than environmental concerns related to cattle production. Consumers have also claimed that they believe veterinarians and producers to be a highly credible source of information when it comes to production practices. This highlights the importance of industry programs and the emphasis producers place on animal care and welfare, and this extends to other livestock industries.

Industry programs in all livestock sectors have an animal care program which can be voluntary or mandatory, depending on the program. Assessments or audits by second or third parties help uphold the standards within the industry programs. These programs provide many educational resources and templates for producers and veterinarians to use as a model for continuous improvement in areas across the operation, from herd health to euthanasia decisions to employee training. The vast majority of customers and consumers expect a standard to be set, adhered to, and followed. Industry programs and organizations like the American Association of Bovine Practitioners (AABP),¹ Beef Checkoff-Funded Beef Quality Assurance (BQA),³ National Dairy Farmers Assuring Responsible Management (FARM) program,⁸ and Calf Care & Quality Assurance (CCQA),⁴ also funded by the Beef Checkoff, have set those standards for producers to follow. These programs provide avenues for continuous improvement while mitigating risks due to employee education and process documentation. Quality assurance is consistent across the sectors of the cattle industry as these programs continue to evolve. Additionally, implementing these programs and guidelines can help veterinarians and producers avoid costly production mistakes and improve employee education and awareness, leading to improved human and calf safety.

Other quality assurance or auditing programs are led by industry or private entities and may be customer-owned. These programs also include assessments, standards and audits that producers adhere to for access to a particular market. While those programs are valuable, they will not be covered here.

American Association of Bovine Practitioners

The American Association of Bovine Practitioners is an international association composed of over 5,000 veterinarians, veterinary technicians and veterinary students interested in bovine (cattle) medicine.¹ The mission of the AABP is to provide support, continuing education, and advocacy for current and

future veterinary professionals and the cattle they serve. The vision of AABP is to serve society as leaders in cattle health, welfare and productivity.

AABP guidelines and position statements are publicly available and serve to provide the expertise of the organization on a variety of topics of importance to cattle veterinarians and the dairy and beef industries. Guidelines and position statements are reviewed on a periodic basis following a member comment period, by relevant committees and approved by the AABP Board of Directors. Guidelines provide a detailed “how-to” guide for various topics and procedures. Position statements are used for advocacy to reflect the organization’s stance on a particular topic.

Veterinarians can access these guidelines and position statements as reference material or for teaching purposes with their clients. For instance, practical guidelines on castration or dehorning practices are available in English and Spanish, allowing for proper teaching and information sharing to workers whose first language is not English. Industry organizations like the FARM, BQA and CCQA programs align with AABP and their guidelines to ensure continuity across the programs. AABP Committees also provide valuable resources to AABP members. Any AABP member may join a committee for a three-year term and contribute to the charge of their respective committees. For instance, the AABP Vaccination Guidelines were developed and approved in 2021 as a resource for member veterinarians in understanding vaccine technologies and strategies for vaccinating a particular group of cattle. Veterinarians can get involved with AABP through committees, contacting their district director, or connecting with schools of veterinary medicine or veterinary technology colleges.

Beef Quality Assurance

In the 1990s, industry groups took initiative in developing voluntary safety and quality assurance programs for pre-harvest segments of the industry which resulted in the Beef Checkoff-funded National Beef Quality Audit (NBQA).^{6,9} Conducted approximately every five years since 1991, the NBQA is a comprehensive survey that evaluates beef industry efforts to improve beef quality. Results of this survey provided the platform for the BQA Program and highlight what management tools could be applied to improve beef quality, food safety and beef production.^{3,6,9} The NBQA allows the beef industry to evaluate progress and assess areas of emphasis for the BQA program. It serves as a beef industry “scorecard” and tracks where we are as an industry as it relates to beef quality.

Across the beef supply chain, companies are seeking cattle producers and business partners that demonstrate similar, more consistent management philosophies, further ensuring the safety and quality of products leaving their facilities. Adoption of BQA principles helps position cattle raisers to take advantage of these opportunities. Additionally, implementing BQA can help producers avoid costly production mistakes and unacceptable production defects. Participation in the BQA program is one way to show customers, whether they are cattle buyers or beef consumers, that producers take every possible step to raise beef responsibly. Seen as a total quality management system, each aspect of a BQA program is economically logical and part of good business management.

The goal of the BQA program is to enhance the desirability of beef by educating producers and veterinarians on best management practices that improve economic sustainability of farms

and ranches and provide consumers with a safe and wholesome beef supply.³ The nationally coordinated, state implemented program partners with state BQA programs across the country who organize and execute BQA training and certification opportunities in their state, providing systematic information to U.S. beef producers of how good husbandry techniques can be coupled with accepted scientific knowledge to raise cattle under optimum management conditions. Online BQA training is also available and provides 24/7 access to the program. Four online courses are available (cow-calf, stocker-backgrounder, feedyard and BQA Transportation) to deliver a program that most closely aligns with the individual’s operation and goals. Spanish translation of materials continues to be a driving factor in new teaching initiatives. Throughout the country hundreds of thousands have now become BQA-certified through in-person and online training, with an estimated 85% of the U.S. fed beef supply now sourced from operations with BQA-certified management.

The BQA program has partnered with other industry initiatives and recognizes equivalency with the FARM program⁸ for dairy producers, the Youth for the Quality Care of Animals program (YQCA)¹⁵ which reaches 4-H, FFA and youth producers with a multispecies quality assurance program curriculum, Verified Beef Production Plus (VBP+)¹³ program in Canada, and the CCQA⁴ program which focuses on the calf-raising sector.

In 2020, the BQA program received important international distinction from the U.S. Department of Agriculture (USDA) regarding the program’s animal welfare standards. The USDA reviewed and certified that the BQA program complies with the International Organization for Standardization (ISO) Animal Welfare Management/General Requirements and Guidance for Organizations in the Food Supply Chain² and meets World Organization for Animal Health (WOAH)¹⁴ standards on animal welfare. Producers and veterinarians adhering to BQA animal care and welfare guidelines, collectively show the U.S. cattle industry’s commitment to advancing animal welfare which increases trust in the industry from a domestic and international standpoint. The Professional Animal Auditor Certification Organization (PAACO) uses these BQA standards in their certified feedyard audit and auditing tools.¹¹

Veterinarians can collaborate with state BQA coordinators for producer trainings or workshops or can become trainers themselves. The BQA program has produced many new training and certification modules and several user-friendly resources that can be used by veterinarians.² Veterinarians serve as key assets for producers with advising on many aspects of the operation such as animal health and welfare, nutrition, biosecurity and general consulting questions. These BQA resources can serve as a template for evaluating the operation’s activities and discovering potential areas of improvement. All resources and information can be found at www.bqa.org.

National Dairy Farmers Assuring Responsible Management

Created by the National Milk Producers Federation (NMPF) in partnership with Dairy Management, Inc., FARM helps ensure the success of the entire industry by demonstrating that U.S. dairy farmers are committed to producing the best milk with integrity. Through five program areas – Animal Care, Antibiotic Stewardship, Biosecurity, Environmental Stewardship and Workforce Development – FARM works with dairy farmers cooperatives, processors, veterinarians and industry partners to

show customers and consumers that the dairy industry holds itself to the highest standards.⁸

The FARM Program works with cooperatives and processors to participate in the program on behalf of their member farms. Science-based standards are developed by subject matter experts, including farmers and veterinarians, reviewed by committees, and finalized with NMPF board of directors' approval. In the field, trained and certified evaluators conduct second-party evaluations to identify progress and continuous improvement opportunities. Verifiers can conduct third-party verifications for only Animal Care areas. With this aggregated data, cooperatives and processors can communicate progress with customers and consumers.

Every three to five years, the Animal Care standards will be refined. FARM Version 5 was released in 2024 after some lag time due to the pandemic. Farmers, veterinarians and industry partners can find information on the website pertaining to protocol development, worker training and guides for subjects like antibiotic stewardship or biosecurity.

The FARM program is also internationally recognized through the ISO Certification and meets the WOAHS Standards on Animal Welfare and Dairy Cattle Welfare.² This adds a layer of credibility to FARM and is important for exports and customer relations. A system that is outcome based and not prescriptive provides flexibility in developing care programs on each operation, while adhering to a higher standard. FARM has pursued and achieved PAACO certification to make sure brands understand that FARM meets the same certifications.

Veterinarians are an essential part of the on-farm support management team serving as trusted advisors for FARM and FARM participants (cooperatives and processors). While cooperatives and processors offer a variety of templates and fillable protocols, veterinarians may use their own protocols to meet standards. Dairy farms should work alongside of their veterinarian to create documentation that accurately captures specific farm practices. Veterinarians can also become an evaluator or auditor. To become more familiar with the program standards and access resources, see their website at www.nationaldairyfarm.com.

Calf care and quality assurance

The cattle industry is incredibly diverse in the types of cattle, operations and products it produces. Healthy cattle are the foundation of every cattle operation, from beef to dairy to veal. While the existing cattle quality assurance programs apply to much of the U.S. cattle industry, the industry is evolving and diversifying. The emergence of dairy, beef, contract heifer raising facilities and calf ranches represent aspects of the cattle production system that currently fall outside of existing programs. As no single organization or program covers all calves, to ensure optimal health and welfare throughout the supply chain, BQA,³ Veal Quality Assurance (VQA),¹² National Dairy FARM,⁸ and Dairy Calf and Heifer Association (DCHA)⁵ have joined together to collaboratively create a new streamlined program for calf care and management, the Calf Care & Quality Assurance Program (CCQA).⁴

Recognizing the complexities of employee training and education, CCQA has multiple avenues that learners can access information. Calf raisers can become CCQA-certified through in-person and online training. Certification modules are available in both English and Spanish and the program has seen much interest in bilingual in-person trainings. Instrumental in this

education are several user-friendly resources available to cattle producers and veterinarians produced by the CCQA program. These important learning subjects provide onboarding training for new employees, especially if they are not familiar with the calf raising industry or evaluating health in calves.

Integrating the internationally recognized animal welfare standards of BQA and FARM into CCQA was intentional, to continue showing the U.S. cattle industry's commitment to advancing animal welfare at all stages of production. Veterinarians can become a CCQA instructor to certify workers on calf raising facilities or use as teaching topics. Utilizing the second- or third-party assessment can also guide continuous improvement. To learn more about the CCQA program, and its producer friendly educational resources, visit www.CalfCareQA.org.

Conclusion

Across the beef and dairy supply chains, companies are seeking cattle producers and business partners that demonstrate similar, more consistent management philosophies, further ensuring the safety and quality of products leaving their facilities. Veterinarians serve as key assets for producers by advising on many aspects of the operation such as animal health and welfare, nutrition, biosecurity and general consulting questions.

Veterinarians can use these industry resources to build on new or existing producer relationships to enhance the care and productivity of the operation. Several resources developed by the AABP, BQA, FARM and CCQA are available for producers, veterinarians and transporters to review for more information on cattle welfare. These opportunities not only add value to your practice, but they also reinforce livestock veterinarians' dedication to healthy animals and a safe food supply.

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