



# **FARM Animal Care Version 5.0 Development Survey Summary Report**

## **Prepared for**

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## Executive Summary

The FARM Animal Care Program standards are revised every three years to reflect the most current science and best management practices within the dairy industry. As an initial start-up activity to kick off planning and development of Version 5.0 of the Animal Care Program, the National Milk Producers Federation developed and disseminated a national survey to provide all industry and related dairy stakeholders with opportunity for input. The primary objective of this survey was to better understand stakeholder perspectives on animal care issues of importance, and capture ideas and levels of support for potential changes to Animal Care standards to help inform the development of FARM Animal Care Version 5.0.

Of the 682 survey responses analyzed, most of the respondents were farmers or farm staff (63%), followed by staff members in dairy processing organizations (16%), veterinarians (12%), staff members in dairy organizations (2%), researchers (1.7%), staff members in retail (1.5%), consumers (1.5%), other (0.9%), nutritionists (0.8%), and staff members in government organizations (0.3%). The majority of the respondents were located in the northeastern or midwestern part of the United States.

Respondents ranked select animal care issues from most important (1) to least important (11). The issue deemed of highest importance was timely care of sick cows, followed by lameness, calf management, management of non-ambulatory cattle, and pain management for common procedures, transport of young calves and handling, euthanasia and transport of cull cows, and cow-calf separation and broken tails. There were some differences in order of priority depending on the role and region a respondent resided in.

Approximately 37% of respondents felt that none of the current animal care standards in Version 4.0 require changes; the remaining 63% felt that one or more standards required changes. Generally, farmers and representatives from co-ops and processors held similar beliefs throughout the survey, and were often less supportive of changes to the program. Conversely, veterinarians, staff from dairy organizations, researchers, and government staff held similar beliefs and were often more supportive of changes to the program. For example, while 40% of all respondents were supportive of introducing a new standard that describes what is acceptable and unacceptable when using cattle prods, electric crowd gates, and trainers, less than 40% of farmers and co-op/processor representatives were supportive; compared to over 70% of veterinarians and staff from dairy organizations.

Most respondents (58%) were supportive of removing the standards that ask about the provision of feed to maintain “health, growth, and vigor” and solely rely on animal observations of body condition to evaluate whether animals are being fed appropriately. Fewer than 50% of all respondents were supportive of most other suggested changes to existing Version 4.0 standards. Forty-five percent of respondents were supportive of changing the corrective action for farms that have extreme values of lameness/broken tails/emaciation from a Continuous Improvement

Plan (must be met within 3 years) to a Mandatory Corrective Action Plan (must be met within 9 months). Forty-two percent of respondents were supportive of providing a specific definition of how quickly an animal must be euthanized once the decision to euthanize has been made (e.g. 4 hours as per American Association of Bovine Practitioners guidelines). While forty-four percent of respondents were supportive of requiring that farms develop a corrective action plan to address moderate levels of lameness if the benchmark is not met.

More than 50% of all respondents felt that corrective actions (Mandatory Corrective Action Plan or Continuous Improvement Plan) should be assigned to a farm if the following standards were not satisfactorily met during a Version 5.0 evaluation (these standards currently do not result in any corrective action if not met under Version 4.0):

- Housing allows all age classes of animals to easily stand up, lie down, adopt normal resting postures and have visual contact with other cattle without risk of injury
- Resting area for all age classes of animals that is clean, dry, provides traction at all times when away from the milking facility and does not pose risk of injury
- Protection from heat and cold for typical climatic condition
- Facilities designed to prevent injuries, slips and falls of animals Having a protocol for lameness prevention and treatment
- Having a protocol for treatment of common diseases (mastitis, metritis, milk fever, ketosis, displaced abomasum, pneumonia, diarrhea)

Overall, respondents of all types tended to be most supportive of tweaking Version 4.0 of the program. It was broadly felt that this program is comprehensive already and required significant investment on the part of farmers to comply with. Respondents felt that tweaks to the program should focus on clarifying existing standards, increasing the reliance on animal-based measures to indicate whether adequate care is being provided, and providing more education and support for farmers in complying with existing standards. Respondents felt strongly that Version 4.0 data should be used to guide benchmarks, and that paperwork should be minimized where possible. Where new standards are needed, respondents felt strongly that areas of change should focus on high-risk areas for animal care and should be based on current science. Similar sentiments were held toward the introduction of new corrective actions, or elevating existing corrective actions to require that certain issues are resolved in a timelier manner, if not currently met.

The results of this survey will be used to inform all levels of governance for the National Milk Producers Federation, and will help guide ongoing discussions about how to develop Version 5.0. Standards, rationale, and accountability measures are reviewed and revised by the [FARM Farmer Advisory Council](#), [Animal Care Task Force](#) and National Milk Producers Federation Animal Health and Well-Being Committee with additional input being provided from industry stakeholder groups through a public comment period. [The National Milk Producers Federation Board of Directors](#) provide final approval on version standards, which would come into effect starting July 1, 2024.

## Introduction

The FARM Animal Care Program standards are revised every three years to reflect the most current science and best management practices within the dairy industry. Standards, rationale, and accountability measures are reviewed and revised by the [FARM Farmer Advisory Council](#), [Animal Care Task Force](#) and National Milk Producers Federation Animal Health and Well-Being Committee with additional input being provided from industry stakeholder groups through a public comment period. [The National Milk Producers Federation Board of Directors](#) provide final approval on version standards, which would come into effect starting July 1, 2024.

In August 2021, the FARM team, in collaboration with [ACER Consulting](#), conducted a series of virtual focus groups with representatives from the farmer, veterinary, academic, and processor/co-op sectors. These focus groups were held to discuss the specific issues and opportunities that each group would like to see addressed in Version 5.0 of the FARM program. The primary themes and ideas that were generated from these focus groups were then used to develop an industry-wide survey that provided stakeholder across the supply chain to voice their opinions on potential modifications to be implemented in Version 5.0 of the FARM Animal Care Program. The primary objective of this survey was to better understand stakeholder perspectives on animal care issues of importance and potential changes to Animal Care standards to help inform the development of FARM Animal Care Version 5.0. The remainder of this report summarizes the final results and major themes from this survey.

## Methods

An online survey was developed by the project team and discussed with the Animal Care Task Force (**Appendix 1**). The survey contained 12 primary questions, which were comprised of multiple choice, ranking, and Likert scale questions designed to understand respondent demographics, perspectives on high priority animal care issues for the U.S. dairy industry, existing standards that may necessitate changes, standards that should result in a corrective action if not met, and level of support for proposed changes to existing standards and/or the introduction of new standards. The survey was made available for response from the public from September 21<sup>st</sup> to November 8<sup>th</sup> of 2021.

All data were downloaded from the survey software (Qualtrics) to Microsoft Excel, where they were cleaned and coded for analysis. With all cleaning and coding complete, the dataset was imported into STATA 16/IC for further analysis. All respondent answers were descriptively analyzed using frequency counts and visually represented using histograms of the proportion of respondents answering within each category. Certain demographic variables (respondent role) and Likert scale options (very important to very unimportant) were condensed during analysis to simplify statistical comparisons. Statistical differences were determined using a chi-square test where significance was reported at a *P*-value of < 0.05.

All text responses from the survey were exported into Microsoft Excel and organized by question category. Responses were read and a general coding method was used to decipher key themes within the text, starting with broad question categories, and narrowing the scope of investigation to pull out key takeaways from the data. Survey responses were evaluated for major themes or topics of discussion that were mentioned by respondents. These themes were summarized and have been reported below.

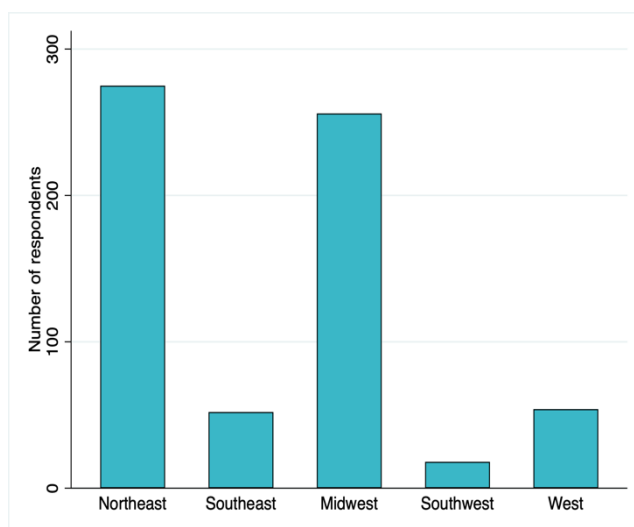
## Results

### Respondents

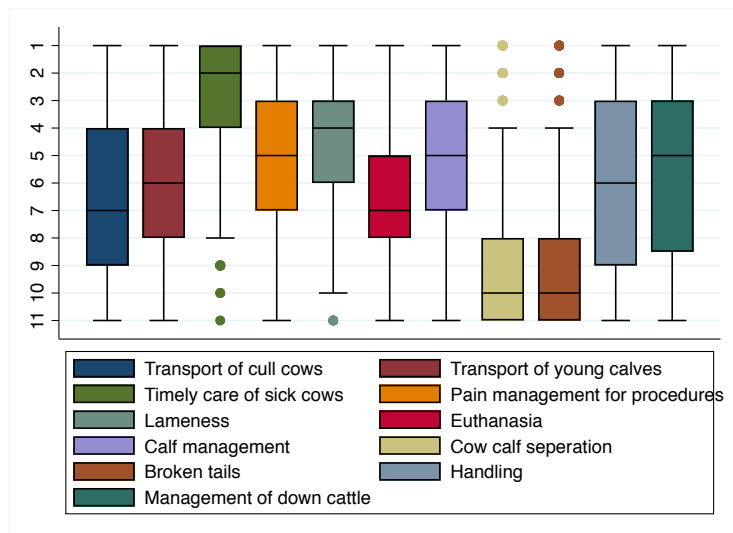
A total of 967 responses were recorded; however, 285 responses were removed due to incomplete responses on the majority of the questions. Therefore, we were left with 682 responses remaining for analysis.

Of the 682 responses, most of the respondents were farmers or farm staff (63%), followed by staff members in dairy processing organizations (16%), veterinarians (12%), staff members in dairy organizations (2%), researchers (1.7%), staff members in retail (1.5%), consumers (1.5%), other (0.9%), nutritionists (0.8%), and staff members in government organizations (0.3%).

The majority of the respondents were located in the northeastern or midwestern part of the United States (**Figure 1; right**).



## Importance of Animal Care Issues

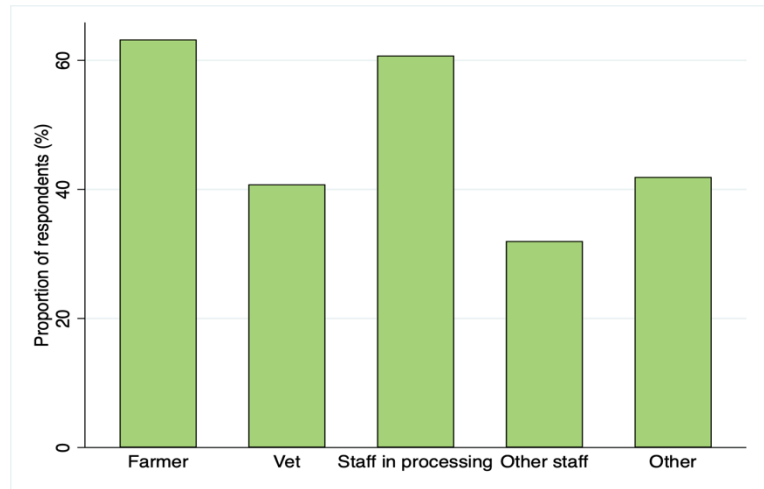


Respondents were asked to rank animal care issues from most important (1) to least important (11). Using the cumulative score, the issue deemed of highest importance was timely care of sick cows, followed by lameness, calf management, management of non-ambulatory cattle, and pain management for common procedures, transport of young calves and handling, euthanasia and transport of cull cows, and cow-calf separation and broken tails.

**Figure 2 (above)** provides the responses and highlights the variation among respondents with respect to the importance placed on individual animal care issues. Lower and upper box boundaries 25th and 75th percentiles, respectively, line inside box median, lower and upper error lines 10th and 90th percentiles, respectively, filled circles data falling outside 10th and 90th percentiles.

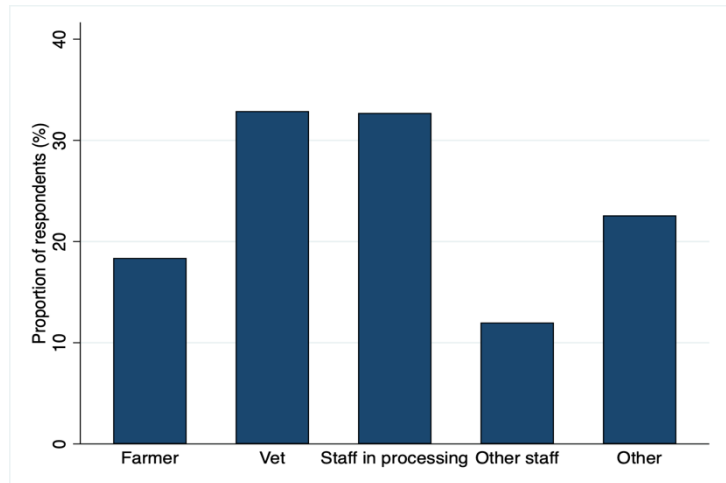
To further investigate the importance of animal care issues, responses to each issue were categorized as high importance (rank of 1 or 2) vs moderate to low importance (rank of 3, 4, 5, 6, 7, 8, 9, 10, and 11). In addition, to explore differences in this rank by respondents' role, responses were further categorized as farmer/farm staff, veterinarian, staff in dairy processing organization, staff member in other organizations (staff member in dairy organization, in retail, and in government), and other (nutritionist, researcher, consumer, and other). Statistical differences were determined using a chi-square test where significance was reported at a *P*-value of < 0.05.

*Timely care of sick cows* was deemed highly important by 58% of respondents. There were differences in the importance of timely care by the role of the respondents, with farmers/farm staff and staff in dairy processing organizations deeming it to be highly important compared to the other roles ( $P < 0.001$ ) (**Figure 3; right**). There was also a difference in region where respondents from the southwest did not rank it as high as those in the other regions ( $P = 0.05$ ).



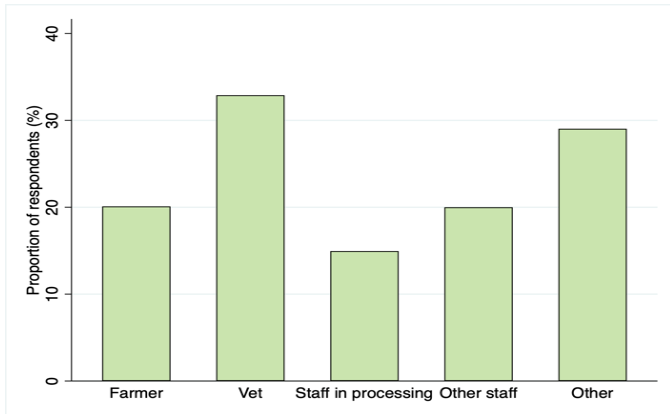
*Handling of cattle* was deemed to be of high importance by 22% of respondents. There were differences with respect to the respondents' role, where it was only deemed as highly important by 8% of staff members in other organizations, whereas it was deemed highly important by 24%, 21%, 17%, and 39% of farmers, veterinarians, staff members in dairy processing, and other roles, respectively ( $P = 0.04$ ). No differences were found between regions ( $P = 0.08$ ).

*Management of non-ambulatory cattle* was deemed as highly important by 22% of respondents. Similar to handling of cattle, there was a difference with respect to respondent role, where farmers and staff members in other organizations ranked it as less important compared to the other roles ( $P = 0.002$ ) (**Figure 4**). No difference was found with respect to region ( $P = 0.14$ ).

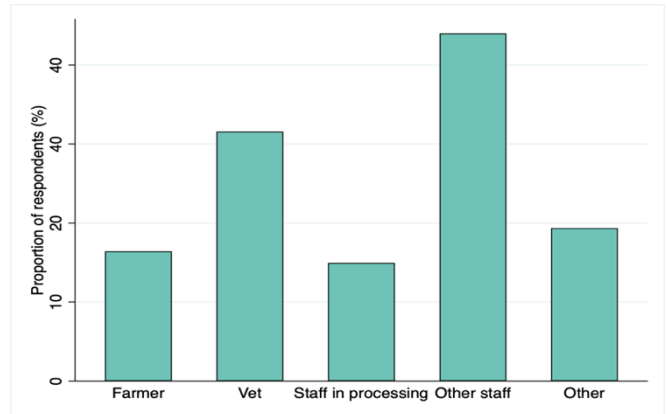


*Lameness* was ranked as highly important by 21% of respondents; veterinarians and respondents in the other category ranked lameness higher than the other respondents ( $P = 0.04$ ) (**Figure 5**). No differences were found with respect to the region of the respondents ( $P = 0.61$ ).

**Pain control** was deemed as highly important by 19% of respondents. Differences were found with respect to role, where veterinarians and staff members in other organizations ranking it higher than the other roles ( $P < 0.001$ ) (**Figure 6**). No differences were found between regions.



**Figure 5** | Proportion of each type of respondent ranking lameness as highly important



**Figure 6** | Proportion of each type of respondent ranking pain control as highly important

**Calf management** was ranked as highly important by 16% of respondents. No differences were found between the respondents' role ( $P = 0.12$ ) or region ( $P = 0.74$ ).

**Cull cow transport** was ranked as highly important by 13% of respondents. No differences were found between the respondents' role ( $P = 0.33$ ) or region ( $P = 0.73$ ). Similarly, young calf transport was ranked as highly important by 12% of respondents and no differences were found with respect to the respondents' role ( $P = 0.17$ ) or region ( $P = 0.67$ ).

With respect to **euthanasia**, it was ranked as highly important by 9% of respondents. Differences were identified with respect to role, where staff members in dairy processing and respondents in the other category ranked it highly compared to other roles ( $P = 0.002$ ). Region was also associated with the rank of euthanasia with respondents located in the southwest ranking it as highly important compared to the other regions.

**Cow calf separation** was only deemed as highly important by 5% of the respondents. There were differences with respect to the role of respondents, where 16% of staff member in other organizations deemed it highly important, whereas only 4%, 0%, 6%, and 3% of farmers, veterinarians, staff members in dairy processing, and other roles, respectively, deemed it as highly important ( $P = 0.02$ ). No differences in region were found ( $P = 0.24$ ).

**Broken tails** were seldomly ranked as highly important, with only 2% of respondents ranking it as such. No differences were found with respondents' role ( $P = 0.67$ ) or region ( $P = 0.61$ ).



## Standards Requiring Changes

Of the 682 respondents, 37% of respondents felt that none of the standards required changes; however, the remaining 63% felt that one or more standards required changes. No differences were found between the respondents' role ( $P = 0.10$ ) or region ( $P = 0.09$ ) with respect to whether they thought changes were required. Of those that felt changes were needed, respondents chose a median of 4 standards with a range from 1 to 12 standards that they felt should change. The remainder of this section reviews each specific standard, differences by demographic factors, and qualitative feedback from respondents on how this standard should change.

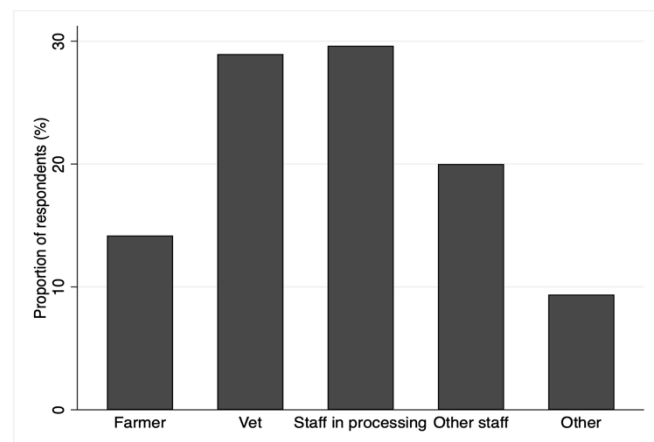
*Do all age classes of animals have access to sufficient quantities of feed for maintenance, health and growth?* Twenty percent of respondents felt that this standard required changes. No differences were found with respect to the respondents' role ( $P = 0.76$ ) or region ( $P = 0.23$ ).

Respondents most commonly reported that they would prefer this standard to be evaluated based on body condition scoring (BCS) and appearance of the animal. Respondents stated that this standard is too subjective and more definition is needed, particularly surrounding "maintenance, health, and growth". It was noted that this standard is somewhat repetitive of other areas in the evaluation, such as providing starter feed to calves, and certain standards should be condensed to avoid unnecessary repetition. Other comments suggested including consultation from nutritionists as part of this standard, as well as increasing the severity of not meeting this standard to require immediate attention. Finally, some comments reflected respondents' opinions that the FARM program should only become involved in evaluating this parameter if there had previously been a history of mismanaged animals on particular farms.

*Does the facility maintain permanent (written or electronic) treatment records, available for review by the Veterinarian of Record, for the treatment of the facility's common diseases?*

Eighteen percent of respondents thought this standard required changes. There were differences with respect to the respondent's role, where veterinarians and staff members in dairy processing were more likely to select that this standard required changes ( $P < 0.001$ ) (**Figure 7; right**). No differences were found with respect to region ( $P = 0.14$ ).

Most commonly, respondents noted that keeping treatment records is cumbersome and not user friendly, with too many requirements and unnecessary levels of detail, in their opinion. More information for farmers and evaluators was requested



surrounding requirements to meet this standard, how records should be stored and accessed, and what needs to be included in the treatment records (e.g. vaccines, treatments for calves, etc.). In addition, respondents requested better training on how to keep electronic records. Some respondents noted that documentation happens in many different ways on farm, and the standards should be more flexible to allow for these farm-level differences.

*Do all family and non-family employees with animal care responsibilities have documented annual continuing education conducted within the past year?* Twenty-three percent of respondents thought this standard should be changed. This was not different by respondents' role ( $P = 0.06$ ) or region ( $P = 0.86$ ). In regard to this standard, respondents often stated that small, family-run farms should not be held to the same standard as larger farming operations. They felt that FARM standards should be modified for family-farms, since it is difficult to maintain the same expectations as large farms. In general, more clarity was requested for this standard, with respondents requesting more specific information on expectations for employees and family members, what constitutes adequate training and continuing education, where training can be accessed, how to document training, and which forms are acceptable as proof of training completion. Comments were made surrounding the timing of this standard as well. In particular, many respondents felt that annual training is excessive and the timeline should be modified to every 2-3 years. Few respondents felt that the training should take place more often than once per year. Many responses surrounded the personnel required to participate in this standard. Respondents felt that there should be different standards for family and non-family employees, with respondents stating that they have different roles and responsibilities on the farm. Some respondents felt that owners and managers should be held to an MCAP for this standard, while others stated that this standard was not necessary for farmers, since they often spend their lives taking care of animals and do not require training unless there is/has been an issue. Finally, a few comments requested additional education, stating that all farm employees should have training on animal handling, biosecurity, mastitis prevention, safety training, and employee well-being programs.

*Are all pre-weaned calves (heifers and bulls) receiving a volume and quality of colostrum or colostrum replacer within 6 hours after birth, even if immediately transported off of the farm?*

Twenty-one percent of respondents wanted this standard to be changed. This was different by the respondent role, where 23%, 28%, and 28% of farmers/farm staff, veterinarians, and other roles wanted this standard to be changed, respectively, whereas only 11% and 12% of staff members in dairy processing and staff members in other organizations wanted this standard changed, respectively ( $P = 0.03$ ). No differences in region were found ( $P = 0.34$ ). Respondents requested that this standard define “volume” and include a statement describing the minimum volume that is required. Comments suggested including a standard for the minimum length of time that a calf is raised before being sold. Respondents most commonly felt that the 6-hour timeline of this standard is difficult to meet and unrealistic for farmers operating out of small farms with no additional help. They felt that 12hrs for colostrum was sufficient. In addition to accounting for the difficulty of small farms, respondents also requested that farmers who do not separate cows from their calves should be exempt from this standard. Generally, respondents felt that this standard was very important and a few mentioned including a record keeping

element. Statements were made surrounding combining this standard with other calf feeding standards to create one category that encompasses adequate feed and water access. More information was requested on colostrum quality, colostrum replacer, and calf-specific supplements.

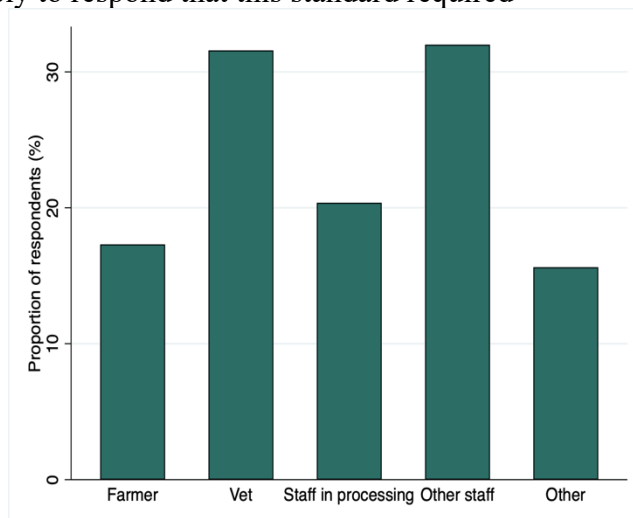
*All pre-weaned calves (heifers and bulls) having access to clean, fresh water appropriate for climatic conditions by day 3?* Seventeen percent of respondents wanted this standard to be changed. Again, there were differences based on the respondents' role with 29% of veterinarians wanting this standard changed, whereas, 18%, 7%, 12%, and 16% of farmers/farm staff, staff members in dairy processing, staff members in other organizations, and respondents in other roles wanted this standard changed, respectively. Respondents often requested that the timeline for this standard be extended, or the standard be removed altogether. They felt that calves do not drink much water at 3 days old and that there is not enough evidence to support providing water availability this early in life. Comments were made surrounding the inconvenience of wasting resources on calves who will not drink water by day 3. Clarity was requested in terms of water availability, with some respondents inquiring if water can be offered a few times a day, rather than having water available 24/7. Conversely, a small number of respondents felt that this standard should be given higher priority and more severe action if not met.

*Do all pre-weaned calves (heifers and bulls) receive a volume and quality of milk or milk replacer by day 3 to maintain health, growth, and vigor until weaned or marketed?* For this standard, 18% of the respondents thought that it required changes. No differences were found with respect to the respondents' role ( $P = 0.62$ ) or region ( $P = 0.54$ ). Similar to what has been seen with previous standards, respondents requested more definition surrounding "volume". In particular, they mentioned specifying a minimum required amount of milk or milk replacer, and/or stating that the amount fed should be "adequate". Respondents felt that this standard could be evaluated somewhere else in the program, such as through body condition scoring of calves. Some adjustments were suggested, such as including records of calf feeding time, including nutritional guidelines for youngstock, and that the standard include "production" when stating maintenance goals (i.e. "to maintain health, growth, vigor, and production, until weaned or marketed").

*Are all calves (heifers and bulls/steers) offered fresh, palatable starter feed by day 3 to maintain health, growth and vigor?* Fifteen percent of respondents thought that this standard should be changed. This did not differ based on the respondents' role ( $P = 0.11$ ) or region ( $P = 0.97$ ). Most often, respondents requested that the timeline of this standard be extended to 1 week, when calves show interest in feed, or it should be removed completely. Respondents felt that calves do not eat starter feed at day 3 and providing feed to calves this early results in waste. In addition, comments were made surrounding farms that do not feed starter at all, yet still maintain healthy calves (e.g. grass-fed dairies only feeding milk before transitioning to grass). It was noted that these farms should be exempt from this standard. More information and education was requested for this standard, with respondents requesting more definition around the term

“palatable”, and more information on early calf feeding in general. There were requests for the standard to include the terms “free choice” and “forage”.

**Are calves being disbudded before 8 weeks of age?** Nineteen percent of respondents thought that this standard should be changed. This differed by the respondent role, where veterinarians and staff members in other organizations were more likely to respond that this standard required changes ( $P = 0.03$ ) (**Figure 8; right**). No difference in region was found ( $P = 0.35$ ).



Comments surrounding the age of disbudding reflected strong opinions to both increase the timeline for this practice (e.g. extend to 12 weeks) and decrease the timeline for this practice (e.g. day 1 - 2 weeks). Some respondents felt that calves should be disbudded at the age that is most convenient for the farmer. Despite these conflicting opinions, respondents generally felt that regardless of the timeline, there should be flexibility to account for producers who are not able to meet the specified age mark. Many felt this flexibility was needed, as delays can happen due to sick calves, seasonal issues, missed calves, polled calves showing late growth in horn buds, etc. Respondents felt that there needs to be guidance for calves that must be disbudded over 8 weeks of age, in terms of what procedures are acceptable and what kind of pain control is permitted. Respondents often felt that specific disbudding protocols for pain control use and appropriate disbudding methods are needed and that they should be documented by the farmer. Other comments surrounded the idea that pain mitigation should be provided for calves that are disbudded after the 8-week timeline, that Barnes dehorners should be allowed for use, and that calves should be disbudded with a protocol that is based on their veterinarian’s recommendation.

**Is pain mitigation provided for disbudding?** For this standard, 19% of respondents thought it needed to be changed. This was different by the respondents' role, where 22%, 25%, 36%, and 22% of veterinarians, staff members in dairy processing, staff members in other organizations, and respondents in other roles wanted this standard changed, respectively, whereas only 16% of farmers wanted this standard to change ( $P = 0.03$ ). No regional differences were observed ( $P = 0.09$ ). Similar to the responses seen for the standard surrounding disbudding age, respondents shared conflicting opinions on the necessity of pain control for disbudding. Many respondents felt that pain mitigation is not necessary for disbudding, particularly when using caustic paste.

Comments suggested that young calves (30hrs old) do not feel pain, that lidocaine isn’t effective for caustic paste, that calves react better to disbudding when no pain control is given, and that more education is needed on the use of pain control for caustic paste disbudding. Some respondents felt that restraining calves for an extended period of time to apply pain mitigation

has negative effects that outweigh the pain associated with disbudding without pain relief. Other respondents stated that this practice should be optional, and requiring pain mitigation for disbudding is too strict of a standard.

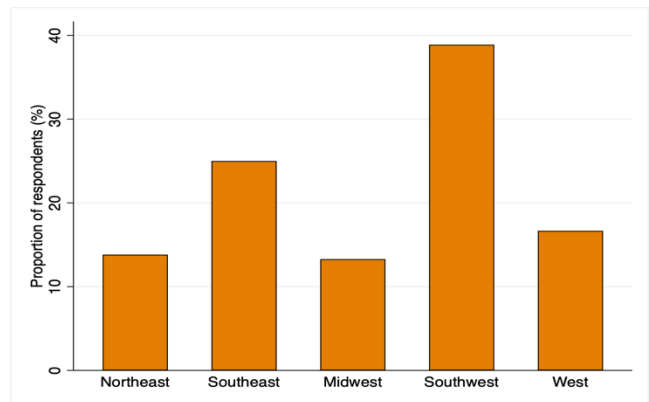
In contrast, many respondents felt that pain mitigation provided for disbudding should be a mandatory, documented standard that is associated with an MCAP if not met. They felt that this should become the minimum standard with a specified protocol, equipment, training, and evidence of implementation. Respondents felt that each farm should have a specific calf management plan that addresses all issues related to calf pain and that including pain mitigation as a standard within the FARM program would be consistent with international calf care standards. Some respondents stated that although they disagree with the standard specifying disbudding age, they felt that pain control should be included as a standard within the program, regardless of calf age at the time of the procedure.

Commonly, respondents stated that not all veterinarians are in agreement on the matter of providing pain control for disbudding. Some veterinarians feel it is necessary, while others feel that the medications do more harm than good in young calves. Some respondents felt that many veterinarians do not indicate a need for pain relief, are not in agreement with the necessity of this practice, may not even provide pain control drugs when requested by producers. Due to these conflicting opinions among the veterinary community, some respondents felt that pain mitigation should be used strictly based on veterinarian recommendation. Some respondents cautioned mandating pain control use for disbudding until more products are approved by the FDA. More clarification surrounding this standard was requested, particularly surrounding the need for a cornual nerve block when using caustic paste and specifying which medications are acceptable for use. Requests were made to include safety protocols for staff with this, and other, disbudding standards, as well as the inclusion of a statement regarding “pain mitigation provided in accordance with AABP guidelines”.

*Does the written Herd Health Plan include written protocols for the treatment of common diseases including mastitis, metritis, milk fever, ketosis, displaced abomasum, pneumonia, diarrhea?* For this standard, 16% of respondents thought that it needed to be changed. No differences with respect to the respondents’ role ( $P = 0.11$ ) or region ( $P = 0.87$ ) were found. Comments surrounding changes to this standard often reflected making the written protocols more convenient for farmers. Particularly, respondents stated that on-farm protocols change often and needing to continuously update paperwork is time consuming. In addition, they felt that the questions on the forms are repetitive, difficult to answer, the forms are too cumbersome, and have to be updated too frequently. Many respondents felt that requiring blanket protocols for disease treatment is not effective and that protocol requirements need to be more specific, particularly in terms of how protocols should be written and how many protocols are needed, since every animal is different and treatments vary.

Respondents felt that this standard shouldn't be required for all operations (e.g. organic farms that won't need to withhold milk due to treatments, farms that have few to no employees etc.). While some respondents felt this standard should involve an MCAP, other comments reflected the opinion that a CIP/MCAP should not be included for treatments surrounding common diseases, since farmers shouldn't have to record everything. In addition, requests were made to re-define the standard for common metabolic diseases and change the wording of the standard from "including" to "such as" to account for farms that do not have the stated issues. Many respondents felt that the protocols should include parameters surrounding disease prevention, since this is a more important factor than treatment of disease. Finally, respondents stated that these protocols should be developed with a veterinarian, that changes to the protocols should be advised by the veterinarian, and that records for drug use and antibiotic purchases should be monitored quarterly by a veterinarian.

*Is the written Herd Health Plan reviewed annually by the Veterinarian of Record and the review has been conducted within the past year?* Fifteen percent of respondents thought that this standard needed to be changed. No differences with respect to the respondents' role ( $P = 0.25$ ) were found; however, regional differences were observed where a higher proportion of respondents in the southwest thought it needed to be changed ( $P = 0.01$ ) (Figure 9; right).



Respondents most often commented that changes to this standard should reflect a different review timeline. Often, requests were made to either extend, or shorten, the required timeline for veterinary review of the Herd Health Plan (e.g. every 6 months, every other year, every 3 years, before next evaluation). Some respondents felt that the Herd Health Plan should only be reviewed when there are changes made to on-farm protocols. Many comments requested modifying the program to only require one veterinary signature to acknowledge all required forms (e.g. VCPR, HHP, etc.) to reduce time requirements for veterinarians. Some respondents requested more clarity surrounding this standard, particularly in regard to better defining who the veterinarian of record is and including that the HHP be reviewed with the producer and all animal handlers on the farm. Other requests specified a need for this standard to be an MCAP, for the standard to be approved by anyone in the veterinary clinic and not just the veterinarian of record, and for milk co-ops to be responsible for conducting review of the documentation.

*95% or more of lactating cows do not have broken tails?* For this standard, 20% of respondents thought it required changes. No differences with respect to the respondents' role ( $P = 0.18$ ) or region ( $P = 0.09$ ) were found. While many respondents recognized that broken tails are an important issue, they often felt that the benchmark of 95% should be re-evaluated and that more research is needed (using data from Version 4.0 or elsewhere) to determine the appropriate

standard. Suggestions were made to change the benchmark from 95% to 50%, 75%, or 80%. Very frequently, respondents stated that the practice of tail docking is necessary to prevent tails from being broken. Many respondents requested that this be allowed to reduce the number of broken tails on farms. Often, respondents mentioned that not every broken tail is the result of human handling and this standard should be better defined (i.e. What constitutes a broken tail? How was the tail broken? What facility did the break occur at?).

Respondents commonly requested a better way to evaluate tail breaks on farms. They felt that sometimes, tail breaks are unavoidable depending on limitations of the facility and that when a cow breaks their tail because it was stepped on by a herdmate, this is out of the farmer's control. In addition, having a set benchmark makes it hard to track progress on farms, since cows with broken tails can be retained in the herd for an extended period of time and the tail break would be included in the evaluation despite it being an old injury. According to respondents, broken tails are not something a producer can fix in hindsight and a benchmark of 95% does not address handling issues. Rather, respondents felt that the program should look for continuous improvement in broken tails as opposed to a set benchmark that needs to be met. Some respondents felt that this standard should be removed, while others requested that it be elevated to an MCAP. Respondents requested additional information and education, specifically documentation in English and Spanish, explaining why tail breaks are unacceptable and more information explaining how to avoid broken tails on farms. Finally, some respondents noted that not all FARM evaluators are consistent with how they evaluate this standard (e.g. palpation vs. visual inspection) and a different evaluation method should be considered, such as the use of a scoring system for tail breaks.

**Other (please specify):** A total of 51 (8%) respondents thought that additional standards other than the ones listed required modification. While many respondents used this question as an opportunity to request additional changes to the FARM program for Version 5.0, other respondents frequently stated that the current standards are enough as is and that no further modifications should be made. In addition, they felt that the standards are updated too frequently, and the evaluation cycle should be extended from 3 to 5 years. In general, many respondents requested less paperwork and documentation for farmers. They felt that the time associated with ensuring all of the correct paperwork, forms, and documentation are in order is too great for farmers and that the program should be re-evaluated for areas where paperwork can be reduced. When looking at requests for specific changes to standards, respondents most commonly requested that tail docking be allowed to prevent broken tails and for cleanliness purposes.

Respondents requested that new, or improved, protocols be created for the following animal care issues:

- Overcrowding, slippery floors, stocking density, housing
- Lameness, foot health
- Dehorning, pain control use
- Hygiene, good husbandry practices, ensuring all cows have clean/dry bedding

- Body conditioning scores
- Calf/cow transport
- Grass/pasture access
- Slaughter
- Method of daily exercise for all age classes
- Calf separation
- Disease prevention

In addition, respondents requested that a standard be included to eliminate the use of tie stalls and continuous tethering of animals, to require that lactating cows remain on the farm for a minimum of 2 lactations, a standard should be introduced that addresses farmer mental health, standards should specify care for pre-weaned bull calves, and shade requirements and heat stress mitigation methods should be defined. Some additional comments were made surrounding certain aspects of the FARM program as a whole. For example, respondents stated that pass/fail outcomes should be based on standards that are of critical concern, rather than completion of paperwork.

Respondents also felt that corrective action timelines should be adjusted to reflect the ease or difficulty of implementing corrective changes on farms. Respondents commented that FARM standards should apply to animals throughout their entire lifecycle, not just during management periods, and that new program implementations should begin in January rather than the middle of the year. In addition to changes to the current standards within the FARM Animal Care program, respondents frequently mentioned a need for increased education of farmers and farm staff. In particular, respondents requested information on why standards are necessary, why changes to the program occur, and why scientific statements that were previously considered relevant are no longer valid.

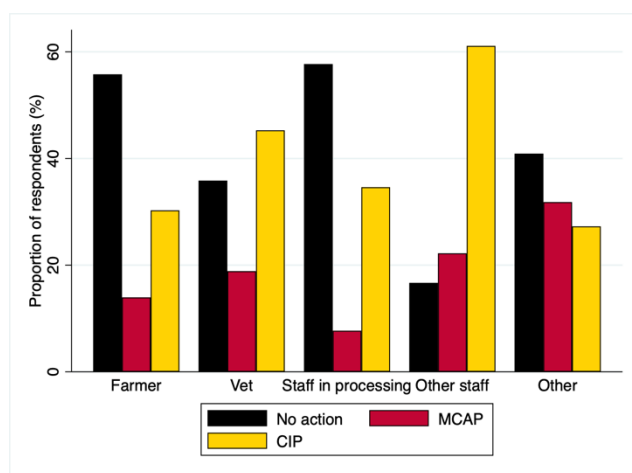


## Moving Currently Existing Standards to Those Requiring a Corrective Action

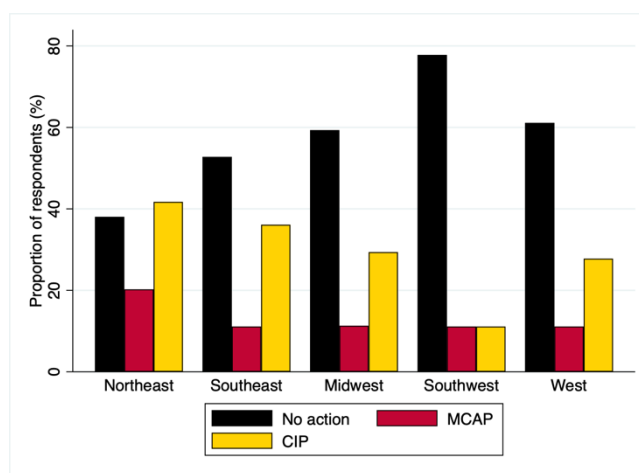
For the following standards, respondents were asked to indicate whether they should remain with no corrective action or be changed to needing a continuous improvement plan (CIP) or mandatory corrective action plan (MCAP).

### *Hygiene scoring: 90% or more observed animals score 2 or less on the FARM Program*

*Hygiene Scorecard* Most respondents thought that this should remain a standard with no corrective action (51%); however, 34% thought it should receive a CIP and 15% thought it should be an MCAP. Differences were found with respect to the respondents' role ( $P = 0.002$ ) and region ( $P = 0.007$ ). Specifically, veterinarians and staff members in other organizations were more likely to think this standard should be moved to a corrective action (**Figure 10**). For region, respondents in the northeast were more likely to think that this standard should move to a corrective action (**Figure 11**).



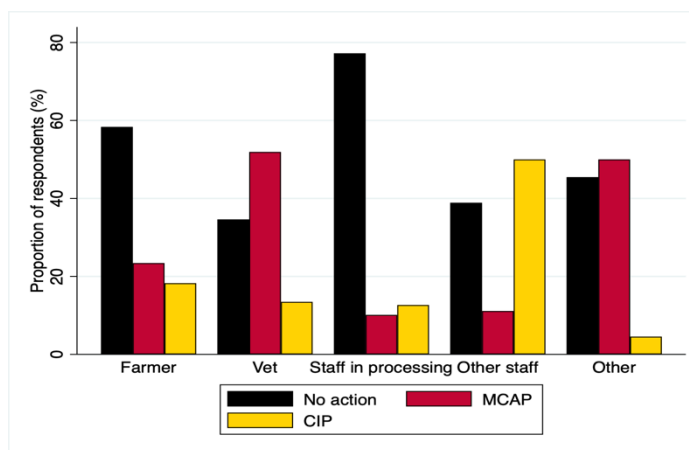
**Figure 10.** Proportion of respondents by response to whether “Hygiene scoring: 90% or more observed animals score 2 or less on the FARM



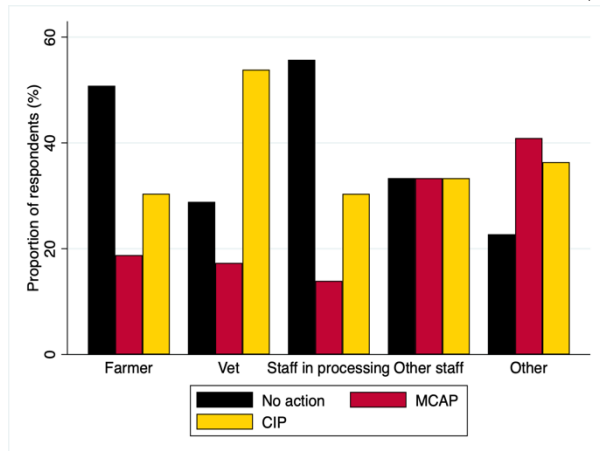
**Figure 11.** Proportion of respondents by response to whether “Hygiene scoring: 90% or more observed animals score 2 or less on the FARM Program Hygiene Scorecard” required changes by region

### *Posted emergency contact information.*

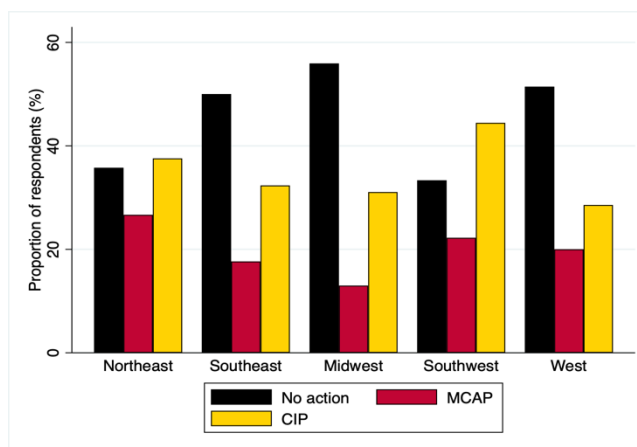
Most respondents wanted to keep this standard with no corrective action (57%), with 17% believing it should be changed to CIP and 26% believing it should be an MCAP. Differences were found by role of the respondents, with veterinarians and staff members in other organizations being more likely to think this standard should be moved to a corrective action ( $P < 0.001$ ) (**Figure 12; right**). No regional differences were found ( $P = 0.24$ ).



**Clean, soft, dry, well-lit and well-ventilated calving area.** Most of the respondents wanted to keep this standard with no corrective action (47%), with 34% believing it should be changed to CIP and 20% believing it should be a MCAP. This was different by the respondents' role, with farmers/farm staff and staff members in dairy processing organisations being less likely to want the standard changed to requiring corrective action ( $P = 0.002$ ) (Figure 13). There were also regional differences with the respondents in the northeast being more likely to think that this standard should move to a corrective action ( $P = 0.02$ ) (Figure 14).



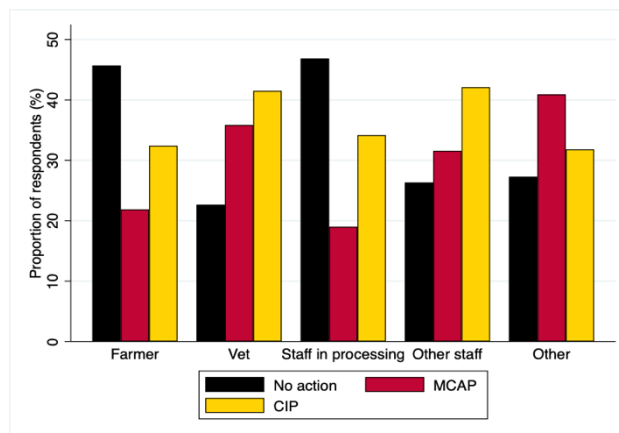
**Figure 13.** Proportion of respondents by response to whether “Clean, soft, dry, well-lit and well-ventilated calving area” required changes by role



**Figure 14.** Proportion of respondents by response to whether “Clean, soft, dry, well-lit and well-ventilated calving area” required changes by region

**Method of daily exercise for all age classes.** The majority of respondents (63%) did not think this standard needed to be changed to a corrective action, with only 26% and 12% of respondents wanting it changed to CIP or MCAP, respectively. This differed by the respondent role, with 67%, 60%, and 65% of farmers, veterinarians, and staff members in dairy processing organisations, respectively, wanting to retain this standard as resulting in no corrective action, while 37% and 41% of staff members in other organizations and other respondents, respectively, preferred that not meeting this standard result in a corrective action ( $P = 0.001$ ). No differences were found between regions ( $P = 0.42$ ).

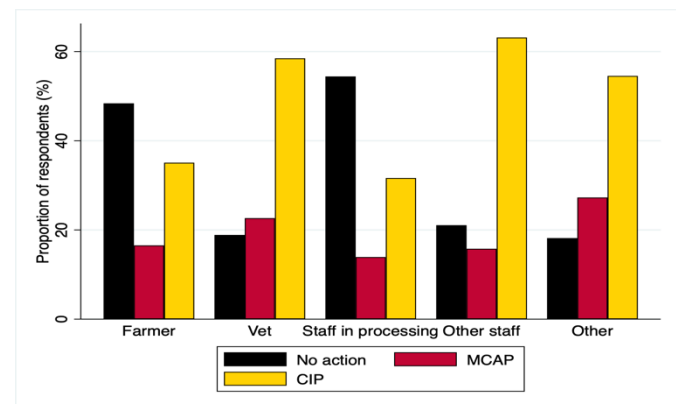
**Protection from heat and cold for typical climatic condition.** A total of 177 respondents (41%) did not think this standard required a change to a corrective action; however, 34% of respondents wanted it changed to a CIP and 25% wanted it to be a MCAP. This again differed by the respondent's role, where farmers/farm staff and staff members in dairy processing organisations wanting to retain this standard as no corrective action ( $P = 0.03$ ) (Figure 15; right). No regional differences were found ( $P = 0.32$ ).



***Housing allows all age classes of animals to easily stand up, lie down, adopt normal resting postures and have visual contact with other cattle without risk of injury.*** Thirty-eight percent of respondents thought this standard did not need to require corrective action, whereas 35% and 28% of respondents wanted it to be changed to a CIP or MCAP, respectively. The responses again differed by the respondents' role, with 48% of staff members in dairy processing organisations wanting this standard to be changed, respectively, whereas 59%, 85%, 84%, and 77% of farmers/farm staff, veterinarians, staff member in other organizations, and other respondents wanting this standard to require corrective action ( $P < 0.001$ ). This did not differ by region ( $P = 0.07$ ).

***Resting area for all age classes of animals that is clean, dry, provides traction at all times when away from the milking facility and does not pose risk of injury.*** A total of 175 respondents (41%) did not want this standard to require a corrective action, whereas 36% and 23% of respondents wanted it to become a CIP or MCAP, respectively. The role of the respondents was also associated with the response to this question, where 53% and 51% of farmers/farm staff and staff members in dairy processing organisations did want this standard to require a corrective action, respectively, whereas 81%, 84%, and 82% of veterinarians, staff members in other organizations, and other respondents wanting this standard changed to require a corrective action ( $P < 0.001$ ). This did not differ by region ( $P = 0.08$ ).

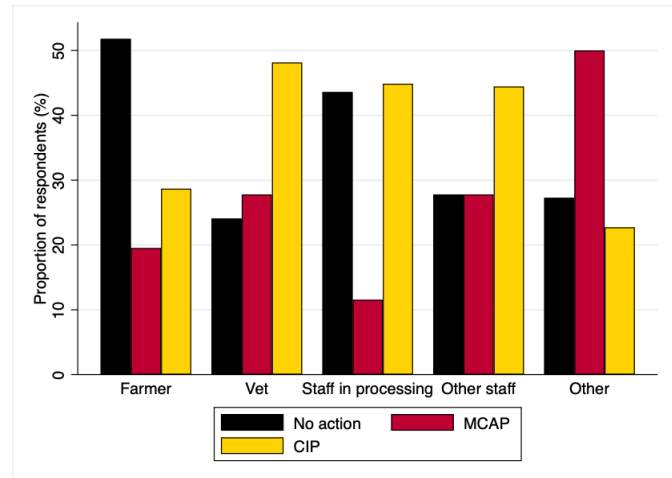
***Facilities designed to prevent injuries, slips and falls of animals.*** With respect to this standard, 43% of respondents did not want this standard to require a corrective action, whereas 40% of respondents wanted it to become a CIP and 18% wanted a MCAP. This different by the respondents' role, where farmers/farm staff and staff members in dairy processing organisations were more likely to not want this standard to require a corrective action (**Figure 16; right**) ( $P < 0.001$ ). This did not differ by region ( $P = 0.63$ ).



***Each animal is identified with a tamper-resistant individual animal ID.*** The majority of respondents (65%) did not want this standard to require a corrective action, however, 22% and 13% of respondents wanted this standard to require a CIP or MCAP, respectively. This also differed by the respondent's role ( $P < 0.001$ ), with 68%, 77%, 50%, and 55% of farmers/farm staff, staff members in dairy processing organisations, staff members in other organisations, and other respondents, respectively, not wanting this standard to require a corrective action. However, only 38% of veterinarians did not want this to standard to require corrective action. This did not differ by region ( $P = 0.45$ ).

**Having a protocol for managing difficult calvings (dystocia).** The majority of respondents (51%) did not want this standard to require corrective action, whereas 27% and 23% of respondents wanted this standard to require a CIP or MCAP, respectively. As many of the above standards, the response differed by role ( $P < 0.001$ ), with only 28% of veterinarians and 28% of staff members in other organisations not wanting this standard to require a corrective action. This is in contrast to 57% of farmers/farm staff, 58% of staff members in dairy processing organisations, and 37% of other respondents not wanting this standard to require corrective action. This did not differ by region ( $P = 0.06$ ).

**Having a protocol for lameness prevention and treatment.** For this standard, 44% of respondents thought that this standard did not require corrective action; however, 34% of respondents wanted this standard to require a CIP and 21% wanted this standard to be a MCAP. This also differed by respondents' role, where farmers were more likely to respond that they did not want this standard to require a corrective action ( $P < 0.001$ ) (Figure 17; right). This did not differ by region ( $P = 0.11$ ).

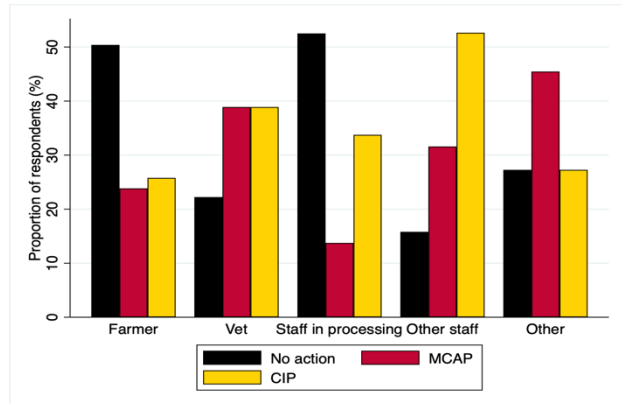


**Having a protocol for biosecurity.** The majority of respondents (60%) did not want this standard to require corrective action, with only 27% and 14% wanting this standard to require a CIP or MCAP, respectively. Similar to many other standards, the responses differed by the respondents' role ( $P < 0.001$ ), with 65% and 70% of farmers/farm staff and staff members in dairy processing organisations not wanting this standard to have a corrective action, respectively. In contrast, only 32% of veterinarians, 33% of staff members in other organisations, and 50% of other respondents did not want this standard to require corrective action. Similar to above, the responses did not differ by region ( $P = 0.27$ ).

**Having a protocol for pest, fly, and parasite control.** The majority of respondents (60%) also did not want this standard to require corrective action, with only 28% and 13% of respondents wanting this standard to have a CIP or MCAP associated with it. The responses differed by the respondents' role ( $P < 0.001$ ), with 63% of farmers/farm staff and 74% of staff members in dairy processing organisations not wanting this standard to have a corrective action, respectively. In contrast, 37% of veterinarians, 44% of staff members in other organisations, and 41% of other respondents did not want this standard to require corrective action. This did not differ by region ( $P = 0.59$ ).

**Having a protocol for vaccination.** Most respondents (55%) did not want this standard to be associated with a corrective action, with 26% wanting it to be a CIP and 19% wanting it to be a MCAP. Again, the responses differed by the respondents' role ( $P < 0.001$ ), with 59% and 66% of farmers/farm staff and staff members in dairy processing organisations not wanting this standard to have a corrective action, respectively, whereas 41%, 22% and 27% of veterinarians, staff members in other organisations, and other respondents not wanting this standard to require a corrective action, respectively. This did not differ by region ( $P = 0.54$ ).

**Having a protocol for treatment of common diseases (mastitis, metritis, milk fever, ketosis, displaced abomasum, pneumonia, diarrhea).** A total of 192 respondents (44%) did not want this standard to require a corrective action, with 30% and 26% of respondents wanting it to have a CIP or MCAP, respectively. This also differed by the respondents' role, with farmers/farm staff and staff members in dairy processing organisations not wanting this standard to have a corrective action ( $P < 0.001$ ) (**Figure 18; right**). This did not differ by region ( $P = 0.65$ ).



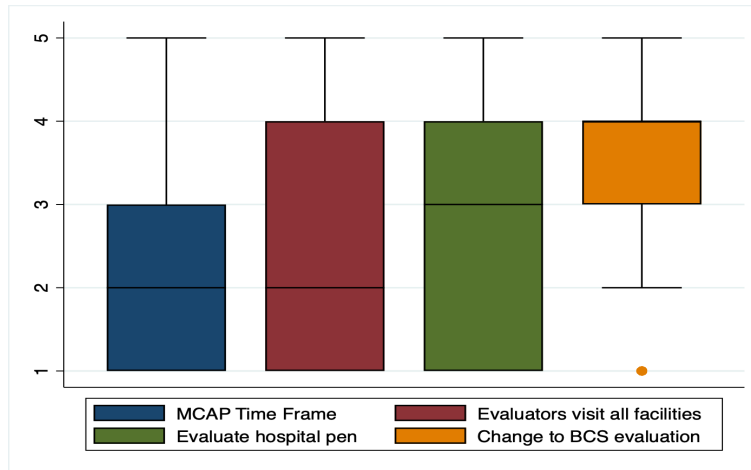
## Level of Support for Potential Changes

Respondents were asked to rank a variety of potential standards from 1 being very supportive to 5 being very unsupportive. To further investigate the suggested changes, responses to each issue were categorized as supportive vs neutral or unsupportive to evaluate the differences that could exist between the respondents' role and region.

### Changes to Program Design & Administration

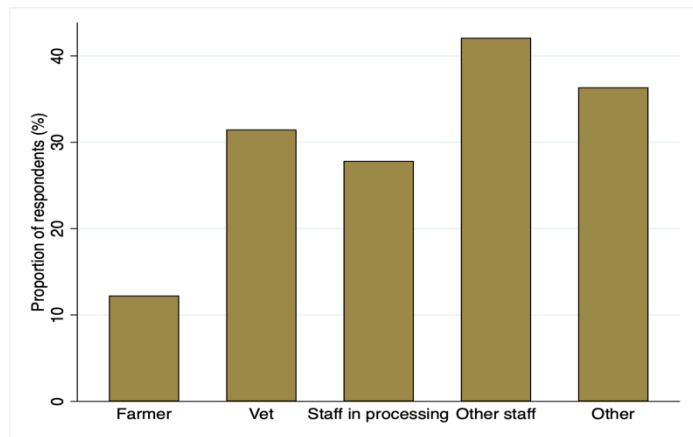
Below is a box-plot highlighting the 4 potential changes that could be made to program design and administration (**Figure 19**). Specifically, the following changes were rated:

- Change the length of time a farm has to address a Mandatory Corrective Action Plan (MCAP) from 9 months to 6 months
- Require that second-party evaluators visit ALL facilities affiliated with a dairy farm (dry cow housing, calf facility, etc.) within a 50-mile radius of the primary milking facility
- Create a section of the evaluation that evaluates the condition of animals in the hospital pen
- Remove the standards that ask about the provision of feed to maintain “health, growth, and vigor” and solely rely on animal observations of body condition to evaluate whether animals are being fed appropriately



**Figure 19.** Box plot of the responses to the support of changes to program design and administration. Lower and upper box boundaries 25th and 75th percentiles, respectively, line inside box median, lower and upper error lines 10th and 90th percentiles, respectively, filled circles data falling outside 10th and 90th percentiles.

**MCAP Time Frame.** Only 20% of respondents were supportive of changing the length of time a farm has to address a Mandatory Corrective Action Plan (MCAP) from 9 months to 6 months. This response differed by the respondents' role ( $P < 0.001$ ), where farmers were more unsupportive of making this change than other respondents (**Figure 20; right**). This did not differ by region ( $P = 0.07$ ).



**Evaluators Visit All Facilities.** Only 32% of respondents were in favor of requiring that second-party evaluators visit ALL facilities affiliated with a dairy farm (dry cow housing, calf facility, etc.) within a 50-mile radius of the primary milking facility. This differed by the respondents' role ( $P < 0.001$ ), where only 28% of farmers and 17% of staff members in dairy processing organisations being in favor of this being introduced. In contrast, 57%, 47%, and 46% of veterinarians, staff members in other organisations, and other respondents were supportive of this standard being introduced, respectively. This was not different by region ( $P = 0.30$ ).

**Evaluate Hospital Pen.** Similar to the other potential changes to standards, only 28% of respondents were in favor of creating a section of the evaluation that evaluates the condition of animals in the hospital pen. This was also different by the respondents' role ( $P < 0.001$ ), where only 17% of farmers were supportive of this standard being introduced. In contrast, 52%, 35%,

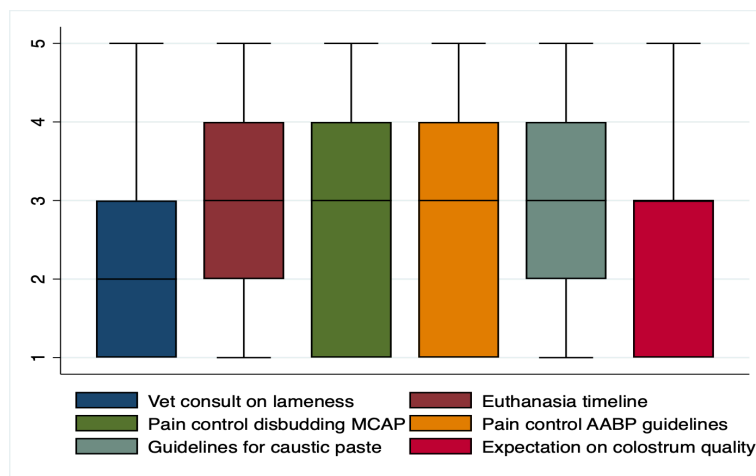
53%, and 46% of veterinarians, staff members in dairy processing organisations, staff members in other organisations, and other respondents were supportive of this standard being introduced, respectively. No differences were found between regions ( $P = 0.58$ ).

**Change to BCS Evaluation:** Most respondents (58%) were supportive of removing the standards that ask about the provision of feed to maintain “health, growth, and vigor” and solely rely on animal observations of body condition to evaluate whether animals are being fed appropriately. Surprisingly, this was not different by the respondents’ role ( $P = 0.09$ ) and did not differ by region ( $P = 0.80$ ).

### Changes to Practices & Protocols

Below is a box-plot highlighting the 6 potential changes that could be made to practices and protocols (**Figure 21**). Specifically, the following changes were rated:

- Require that a farm’s protocol for lameness prevention and treatment specifically includes that they will consult with a veterinarian
- Provide a specific definition of how quickly an animal must be euthanized once the decision to euthanize has been made (e.g. 4 hours as per American Association of Bovine Practitioners guidelines)
- Change the corrective action for farms that do not use pain control for disbudding from a Continuous Improvement Plan (must be met within 3 years) to an Mandatory Corrective Action Plan (must be met within 9 months)
- Require farms to only use pain control products that are recommended by the American Association of Bovine Practitioners
- Provide more specific guidance around the use of caustic paste as a method for disbudding
- Define expectations as to how producers should evaluate quality of colostrum



**Figure 21.** Box plot of the responses to the support of changes to practices and protocols. Lower and upper box boundaries 25th and 75th percentiles, respectively, line inside box median, lower and upper error lines 10th and 90th percentiles, respectively, filled circles data falling outside 10th and 90th percentiles.

***Vet Consult on Lameness.*** Only 21% of respondents were supportive of requiring that a farm's protocol for lameness prevention and treatment specifically includes that they will consult with a veterinarian. The responses differed between the respondents' role ( $P < 0.001$ ), where 35% and 58% of veterinarians and staff members in other organisations were supportive. However, only 16%, 15%, and 23% of farmers, staff members in dairy processing organisations, and other respondents were supportive of this standard being introduced, respectively. No differences in the region of respondents were found ( $P = 0.44$ ).

***Euthanasia Timeline.*** A total of 178 (42%) of respondents were supportive of providing a specific definition of how quickly an animal must be euthanized once the decision to euthanize has been made (e.g. 4 hours as per American Association of Bovine Practitioners guidelines). Similar to previous questions, the responses differed by the respondents' role ( $P < 0.001$ ). Specifically, 72% of veterinarians, 95% of staff members in other organisations, and 55% of other respondents were supportive of this standard being introduced. In comparison, only 28% and 47% of farmers and staff members in dairy processing organisations were supportive of this standard being introduced, respectively. This was not different by region ( $P = 0.29$ ).

***Pain Control for Disbudding as an MCAP.*** Only 33% of respondents were supportive of changing the corrective action for farms that do not use pain control for disbudding from a Continuous Improvement Plan (must be met within 3 years) to a Mandatory Corrective Action Plan (must be met within 9 months). This differed by the respondents' role ( $P < 0.001$ ), where 63% of veterinarians and 63% of staff members in other organisations were supportive of this change. Only 24%, 31%, and 46% of farmers/farm staff, staff members in dairy processing organisations, and other respondents being supportive of this change, respectively. The response was also different by region ( $P = 0.02$ ), with 42%, 34%, 27%, 9%, and 31% of respondents in the northeast, southeast, midwest, southwest, and west being supportive, respectively.

***Pain Control Under AABP Guidelines.*** Only 33% of the respondents were supportive of requiring farms to only use pain control products that are recommended by the American Association of Bovine Practitioners. Again, this differed by the respondents' role ( $P < 0.001$ ), where 61% of veterinarians, 74% of staff members in other organisations, and 50% of other respondents were supportive of this change. In contrast, only 24% of farmers/farm staff and 26% of staff members in dairy processing organisations were supportive of introducing this change. This did not differ by region ( $P = 0.06$ ).

***Guidelines for Caustic Paste:*** Similar to many of the other potential standards, few respondents (35%) were supportive of providing more specific guidance around the use of caustic paste as a method for disbudding. The responses differed by the respondent's role ( $P < 0.001$ ), where only 23% of farmers were supportive of this change, whereas 53%, 47%, 84%, and 41% of veterinarians, staff members in dairy processing organisations, staff members in other organisations, and other respondents were supportive of this standard being introduced, respectively. The responses did not differ by region ( $P = 0.38$ ).

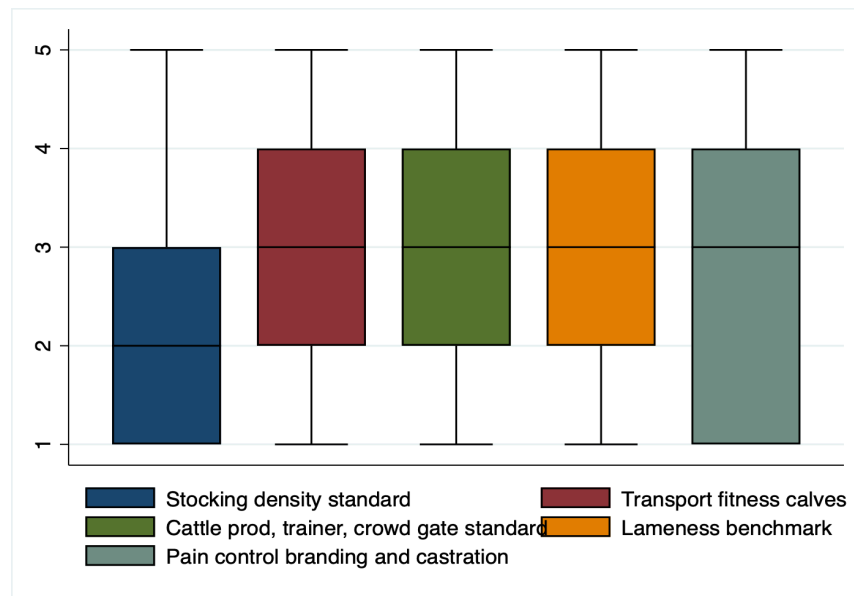


**Expectation on Colostrum Quality:** Few respondents (22%) were supportive of defining expectations as to how producers should evaluate quality of colostrum. This differed by the respondents' role ( $P < 0.001$ ) where 16% and 10% of farmers/farm staff and staff members in dairy processing organisations were supportive for this standard to be introduced, respectively. However, 50%, 42%, and 41% of veterinarians, staff members in other organisations, and other respondents were supportive of this standard being introduced, respectively. This did not differ by region ( $P = 0.92$ ).

### Introducing New Standards

Below is a box-plot highlighting the 5 potential new standards that could be introduced (**Figure 22**). Specifically, the following new standards were rated:

- Introduce a new standard that provides minimum expectations for stocking density
- Include a standard that addresses fitness for transport of calves
- Include a standard that describes what is acceptable and unacceptable when using cattle prods, electric crowd gates, trainers
- Establish a minimum benchmark for the level of moderate lameness in the herd
- Require the use of pain mitigation for branding and/or castration



**Figure 22.** Box plot of the responses to the support of the introduction of new standards. Lower and upper box boundaries 25th and 75th percentiles, respectively, line inside box median, lower and upper error lines 10th and 90th percentiles, respectively, filled circles data falling outside 10th and 90th percentiles.

**Stocking Density.** Only 25% of respondents were supportive of introducing a new standard that provides minimum expectations for stocking density. The level of support for this standard differed by the respondents' role ( $P < 0.001$ ), where 44% of veterinarians, 58% of staff members

in other organisations, and 41% of other respondents were in support, whereas 17% of farmers/farm staff and 24% of staff members in dairy processing organisations were supportive. No differences were found between regions ( $P = 0.32$ ).

**Transport Fitness.** Few respondents (27%) were supportive of including a standard that addresses fitness for transport of calves. Similar to above, the response differed by the role of the respondent ( $P < 0.001$ ), with 56% of veterinarians, 63% of staff members in other organisations, and 46% of other respondents being in support. In contrast, 17% of farmers/farm staff and 24% of staff members in dairy processing organisations were supportive. No differences were found between regions ( $P = 0.66$ ).

**Cattle Prods, Trainers, Crowd Gates.** With respect to including a standard that describes what is acceptable and unacceptable when using cattle prods, electric crowd gates, and trainers, 40% of respondents were supportive of introducing this standard. The response differed by the respondents' role ( $P < 0.001$ ), where 29% and 38% of farmers/farm staff and staff members in dairy processing organisations were supportive, respectively, whereas 70%, 84%, and 64% of veterinarians, staff members in other organisations, and other respondents were supportive, respectively. No differences were noted between regions ( $P = 0.40$ ).

**Lameness Benchmark.** Few respondents (34%) were supportive of establishing a minimum benchmark for the level of moderate lameness in the herd. The response differed by the respondents' role ( $P < 0.001$ ), where 24% and 32% of farmers/farm staff and staff members in dairy processing organisations were supportive, respectively, whereas 54%, 84%, and 59% of veterinarians, staff members in other organisations, and other respondents were supportive, respectively. No differences were noted between regions ( $P = 0.21$ ).

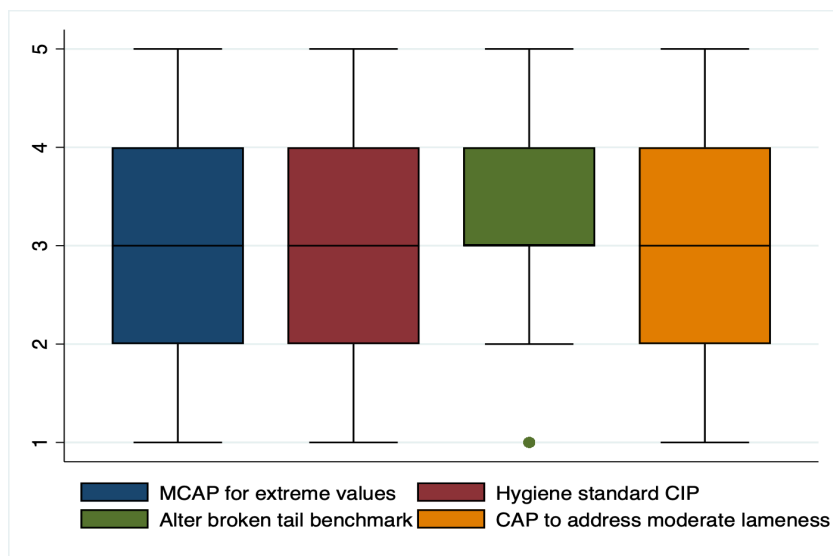
**Pain Control for Branding and Castration.** For requiring the use of pain mitigation for branding and/or castration, 29% of respondents were supportive of introducing this change. The response differed by the respondents' role ( $P < 0.001$ ), where 20%, 26%, and 41% of farmers/farm staff, staff members in dairy processing organisations, and other respondents were supportive, respectively, whereas 57% and 63% of veterinarians and staff members in other organisations were supportive, respectively. The responses differed by region ( $P = 0.03$ ) with 37%, 26%, 24%, 9%, and 23% of respondents in the northeast, southeast, midwest, southwest, and west being supportive, respectively.

### **Changes to Animal-Based Measures**

Below is a box-plot highlighting the 4 changes to animal-based measures standards that could be introduced (**Figure 23**). Specifically, the following new standards were rated:

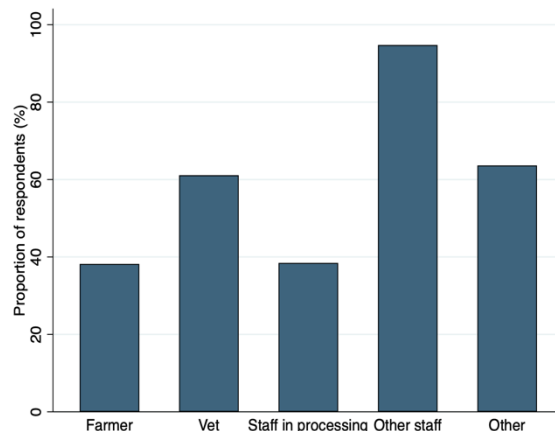
- Change the corrective action for farms that have extreme values of lameness/broken tails/emaciation from a Continuous Improvement Plan (must be met within 3 years) to a Mandatory Corrective Action Plan (must be met within 9 months)

- Modify the hygiene scoring standard to result in a Continuous Improvement Plan (if the benchmark of 90% is not met)
- Reconsider the benchmark for broken tails (currently set at 95% of the herd with unbroken tails) and set it based on the results collected from the FARM Version 4.0 program
- Require that farms develop a corrective action plan to address moderate levels of lameness if the benchmark is not met



**Figure 23.** Box plot of the responses to the support of the introduction of new standards. Lower and upper box boundaries 25th and 75th percentiles, respectively, line inside box median, lower and upper error lines 10th and 90th percentiles, respectively, filled circles data falling outside 10th and 90th percentiles.

**MCAP for Extreme Values.** A total of 193 (45%) of respondents were supportive of changing the corrective action for farms that have extreme values of lameness/broken tails/emaciation from a Continuous Improvement Plan (must be met within 3 years) to a Mandatory Corrective Action Plan (must be met within 9 months). The response also differed by the respondents' role ( $P < 0.001$ ), where farmers/farm staff and staff members in dairy processing organisations were less supportive of this change (Figure 24). This did not differ by region ( $P = 0.16$ ).



**Hygiene Standard CIP.** Some of the respondents (37%) were supportive of modifying the hygiene scoring standard to result in a Continuous Improvement Plan (if the benchmark of 90% is not met). Similar to above, the response differed by the respondents' role ( $P < 0.001$ ), with only 30% of farmers/farm staff, 33% of staff members

in dairy processing organisations, and other respondents being supportive of making this change, whereas 61% and 74% of veterinarians and staff members in other organisations being supportive, respectively. This was not different by regions ( $P = 0.14$ ).

***Alter Broken Tail Benchmark.*** A total of 153 respondents were supportive of reconsidering the benchmark for broken tails (currently set at 95% of the herd with unbroken tails) and set it based on the results collected from the FARM Version 4.0 program. Unsurprisingly, this was also different by the respondents' role ( $P < 0.001$ ), where 74% of farmers/farm staff and 68% of other respondents were not supportive of this change. In contrast, 63%, 47%, and 47% of veterinarians, staff members in dairy processing organisations, and staff members in other organisations being supportive, respectively. This was not different by the respondent's region ( $P = 0.46$ ).

***CAP to Address Moderate Lameness.*** With respect to requiring that farms develop a corrective action plan to address moderate levels of lameness if the benchmark is not met, 44% of respondents were supportive of this change. The response differed by the respondents' role ( $P = 0.007$ ), where 53% of farmers/farm staff and 51% of veterinarians were supportive of this change. In contrast, 37%, 18%, and 34% of staff members in dairy processing organisations, staff members in other organisations, and other respondents being supportive, respectively.

## **Additional Comments**

Respondents were given the opportunity to comment on any additional animal care issues that had not been addressed in Version 4.0 of the FARM program and/or any final comments that respondents felt the FARM team should consider when developing Version 5.0.

Frequently, respondents stated that there was too much paperwork associated with the program and requested a way to make record keeping easier for producers. They felt that there are many new requirements and it can be difficult to keep up with constant changes. They mentioned that standards and changes to the program should be informed and decided on by farmers who actually own and operate dairy facilities. Often, respondents stated that the program should not be changed and that the standards are fine as is. Comments were made indicating that the program is not necessary because the standards are self-explanatory and farmers are doing most of these things already. In support of this, respondents felt that farmers who are not following these standards, regardless of the FARM program, would not have a successful operation and would be out of business. Respondents often pointed out that farmers are already doing an acceptable job and they do not need instruction on what to do with their farms.

A common concern from respondents was the inability to tailor the program based on farm size, farm type, and/or available staff. Respondents frequently mentioned that they would prefer if standards were modified to account for differences in operations, since every farm is different. In particular, they requested a better definition of "family farm" be specified, more discretion be

used to evaluate standards based on what works for each individual farm, and a request for standards to be flexible to account for differences in farming situations. Many comments from respondents indicated a need for better enforcement of the standards that are already in place. For example, respondents commented on having penalties for non-compliance, and developing methods to ensure that producers are actually complying with standards, training, and education, rather than just documenting completion of these things.

Some respondents requested more support and training for evaluators, as some respondents have had past issues with evaluations on farms. Specifically, respondents felt that evaluators only see a snapshot of the facility, not the entire operation as it progresses overtime. One participant indicated that they have had issues with evaluators fabricating results on evaluations, handing out pre-made protocols to farmers, and making disparaging remarks to farmers about the program. This participant felt that the training of evaluators needs to be addressed to reduce these instances. Other comments about the FARM program mentioned implementing a calf management protocol that specifies standards for calf care, rather than including individual standards. In addition, a few comments were made surrounding veterinary influence, as respondents noted that not all veterinarians are in agreement with all practices (e.g. pain control for disbudding).

## Major Qualitative Themes & Takeaways

Throughout this survey, respondents were given many opportunities to describe their perspectives and opinions as they relate to potential changes to animal care standards, as well as the FARM program in general. These comments have been taken into consideration to evaluate key takeaways, as well as major themes and topics of discussion. These key themes have been described below.

### *FARM Cycle Update Timelines*

Respondents frequently mentioned difficulties with the frequency with which the FARM program is updated and new standards are implemented. Respondents felt that updates to the program happen too quickly and that changes need to be gradual, so it is easier for farmers to adopt changes as they come, rather than still working towards implementing changes in accordance with Version 4.0 when new changes are introduced in Version 5.0. Often, respondents mentioned that they are very concerned about “mission creep” of the program, in which new things are added every cycle. They felt that not much should be changed from Version 4.0 and that any new changes should come from the evaluation of Version 4.0. For example, respondents asked for a status update of the industry using data from Version 4.0 of the program. Specifically, has the industry improved? Which areas require further attention? Are there standards that can be removed or reduced based on increased producer compliance? Respondents frequently mentioned that changes should be guided based on farmer and veterinarian input and industry results. They felt that new additions should not be included in the

program until current standards have been met and that limiting new additions allows farmers to keep up with, and address, other areas of the program that they could improve on.

### *Clarity, Guidance, and Producer Commitment*

A common theme throughout all text responses and requests for change was the need for clarity and guidance on standards. Respondents frequently requested more specific definitions, clarification on requirements needed to meet each standard, and guidance in terms of steps needed to comply with standards that are currently not met. Respondents requested that standards be evaluated based on clear, measurable results, rather than subjective measures to eliminate gaps in the program where farms pass inspection despite not being in true compliance with certain standards. Overall, more information and clarification were viewed as being needed in all areas of the program.

Respondents often mentioned the commitment required by producers to satisfy requirements of the FARM program, with various mentions of paperwork in particular. Respondents felt that the amount of paperwork that is required for producers is excessive and should be made easier and less time consuming by streamlining the program to avoid unnecessary duplication. Comments were made that meeting the standards of this program should not be made more difficult by complicated paperwork. In addition, some respondents mentioned that a larger online platform could be useful for larger farms to document their training, animal care agreements, protocols, etc. Many farmers are already familiar with certain management software and this could be leveraged to create an online platform that is streamlined and easy to use.

### *Small Farms and Program Flexibility*

Throughout the qualitative text responses, respondents frequently mentioned the need for the FARM Animal Care program to be flexible and cognisant of different farming operations. In particular, respondents often mentioned the difficulties of operating a small farm and being held to the same standard of larger farming operations. Respondents feel that the size and age of the dairy operation need to be taken into consideration when evaluating farms. Small farms often don't have the capacity to meet the same standards as larger farms, due to limited staff or facilities. In addition, small farms are often older than large farms, and are limited in the operational changes that they can make. Respondents requested that small farms be considered differently from larger farms and that the FARM team include resources to assist small farms with compliance of standards.

In general, many comments referenced the need for flexibility in many of the current, and future, FARM standards. Respondents felt that the guidelines should guide producers, but that there are many right ways to achieve a desired outcome. Choices should be made available from multiple options to allow for different, but equally correct, farming strategies (e.g. multiple options for housing strategies that fit within a specific standard). In addition, specific changes and standards should be flexible to allow for considerations that may make it difficult for farmers to meet requirements. For example, respondents mentioned that some farms do not have adequate access

to veterinary care and this should be taken into consideration when they are being evaluated. Respondents also mentioned that specific standards that require drastic changes to facilities are difficult to comply with in a specified timeframe and that smaller, easier changes are more reasonable.

### *Farmer Support and Collaboration*

The issue of producers lacking adequate support from the FARM program was discussed a number of times by respondents. Often, comments were made that farmers feel micromanaged by the FARM program and that standards are created to appease animal activists, rather than support the farmer in improving their operation. Respondents felt as though the public was not made aware of all of the positive impacts they are working towards on their farms and that consumers should be made aware of the program and the good that farmers are doing. Many respondents stated that farmers feel they are being punished for their downfalls, rather than celebrated for their improvements, and are often discouraged by additional implemented changes with no additional support or education. Comments indicated that farmers feel that they are not trusted to do their job correctly and that mandating a program puts a divide between farmers and processors/co-ops/regulators/consumers etc. Farmers are often under stress and can be short on help, yet they feel that they are trying to do their best with what is available to them. Respondents stated that farmers often feel they are not supported in terms of resources being made available to assist producers in implementing changes in order to meet FARM standards. A request was made for more support, informational documents, and educational resources to be made available when Version 5.0 of the FARM program launches to help farmers meet requirements.

### *Educational Opportunities and Increased Communication*

Similar to comments surrounding lack of support for farmers in terms of compliance with FARM program standards, many respondents felt that program respondents are in need of better education and information surrounding the program as a whole. In particular, there were a number of requests for opportunities to educate producers on the “*why*” behind certain standards. Respondents often stated that most standards are already implemented on farms and don’t require a standard, farmers who do not take good care of their animals wouldn’t have productive farms anyways, and that the FARM program should be informed by producers and veterinarians rather than individuals with no connection to dairy farming. Opportunities exist to educate producers, and other FARM respondents, on why these statements are not entirely correct and the importance of implementing the standards that currently exist in the program.

## Appendix 1 | Industry Survey

### Evaluating the U.S. Dairy Industry's Perspective on High Priority Animal Care Issues & Opportunities to Improve FARM Animal Care Version 5.0

#### Opportunity for Input

The National Milk Producers Federation (NMPF) has officially kicked-off planning and development of the National Dairy FARM Animal Care Version 5.0. Over the next year and a half, we will work through the FARM Farmer Advisory Council, Animal Care Task Force, NMPF Animal Health and Wellbeing Committee, and NMPF Board of Directors to review Version 4.0 and design a series of updates and improvements for Version 5.0 of the program, which would come into effect starting July 1, 2024.

As part of this process, we are providing dairy farmers and our industry stakeholders and partners with an opportunity to provide early input on the topics, issues, and potential changes they would like NMPF to consider for this program. We anticipate this survey to take approximately 15 minutes to complete. All responses will be anonymous. The survey results will be summarized into a final report, which will be available on the FARM website later in 2021.

Visit [www.nationaldairyfarm.com](http://www.nationaldairyfarm.com) to learn more about FARM and the Animal Care revision process.

Please contact Emily Yeiser Stepp ([eyeiserstepp@nmpf.org](mailto:eyeiserstepp@nmpf.org)) or Steven Roche ([sroche@acerconsult.ca](mailto:sroche@acerconsult.ca)) with any questions about this survey.

Thank you,

The FARM Team

#### 1. Which of the following titles best describes your primary role in the U.S. dairy industry:

- Farmer
- Veterinarian
- Nutritionist
- Researcher
- Staff member in dairy farmer organization (e.g. National Milk Producers Federation, State Dairy Association)
- Staff member in dairy processing sector (co-op or processor) / FARM Animal Care participant
- Staff member in retail / foodservice sector
- Staff member in state / federal government
- Consumer
- Other (please specify): \_\_\_\_\_

#### 2. Which region of the United States do you primarily work in?

- Northeast
- Southeast
- Midwest
- Southwest
- West



**3. How would you rank the following animal care issues in order of how important it is that the U.S. dairy industry address them?** Please rank (1=top priority, 11=lowest priority) use the drag and drop feature for each textbox.

- Transport of cull cows
- Transport of young calves
- Timely care of sick cows (prompt treatment)
- Pain management for common procedures (e.g., dehorning)
- Lameness
- Euthanasia
- Calf management
- Low stress animal handling
- Management of non-ambulatory animals
- Broken tails
- Cow-calf separation

**4. The FARM program is currently in its 4th version. Each version outlines the animal care standards that U.S. dairy farmers are expected to work towards meeting on their operations. Listed below are a number of the standards from Version 4.0 that have been identified as potentially needing changes. Please choose up to 5 standards that you feel are the most important to modify in next version (Version 5.0):**

- All age classes of animals have **access to sufficient quantities of feed** for maintenance, health and growth
- The facility maintains **permanent (written or electronic) treatment records**, available for review by the Veterinarian of Record, for the treatment of the facility's common diseases
- All family and non-family employees with animal care responsibilities **have documented annual continuing education** conducted within the past year
- All pre-weaned calves (heifers and bulls) receiving a **volume and quality of colostrum or colostrum replacer within 6 hours after birth**, even if immediately transported off of the farm
- All pre-weaned calves (heifers and bulls) have **access to clean, fresh water** appropriate for climatic conditions by day 3
- All pre-weaned calves (heifers and bulls) receive a **volume and quality of milk or milk replacer by day 3** to maintain health, growth, and vigor until weaned or marketed
- All calves (heifers and bulls/steers) offered fresh, palatable starter feed by day 3 to maintain health, growth and vigor
- Calves are **disbudded before 8 weeks of age**
- **Pain mitigation** is provided for disbudding
- The written Herd Health Plan includes **written protocols for the treatment of common diseases** including mastitis, metritis, milk fever, ketosis, displaced abomasum, pneumonia, diarrhea
- The written **Herd Health Plan is reviewed annually by the Veterinarian of Record** and the review has been conducted within the past year
- 95% or more of lactating cows do not have broken tails
- Other (please specify): \_\_\_\_\_

**5. Based on your selections in the previous question (Q4), please briefly describe what changes you feel the FARM program should consider making to improve these standards.**

*Textbox provided for written answers of up to 1000 characters in length.*

**6. Listed below are FARM program standards for animal care that do not currently require any form of corrective action under Version 4.0. Please indicate whether you feel a corrective action should be assigned to any of the following standards if they are not met by a given farm: 0 = No corrective action; 1 = Mandatory Corrective Action Plan (MCAP): Farm must correct within 9 months; 2 = Continuous Improvement Plan (CIP): Farm must correct within 3 years**

- Hygiene scoring: 90% or more observed animals score 2 or less on the FARM Program Hygiene Scorecard
- Posted emergency contact information
- Clean, soft, dry, well-lit and well-ventilated calving area
- Method of daily exercise for all age classes
- Protection from heat and cold for typical climatic condition
- Housing allows all age classes of animals to easily stand up, lie down, adopt normal resting postures and have visual contact with other cattle without risk of injury
- Resting area for all age classes of animals that is clean, dry, provides traction at all times when away from the milking facility and does not pose risk of injury
- Facilities designed to prevent injuries, slips and falls of animals
- Each animal is identified with a tamper-resistant individual animal ID
- Having a protocol for **managing difficult calvings (dystocia)**
- Having a protocol for **lameness prevention and treatment**
- Having a protocol for **biosecurity**
- Having a protocol for **pest, fly, and parasite control**
- Having a protocol for **vaccination**
- Having a protocol for **treatment of common diseases** (mastitis, metritis, milk fever, ketosis, displaced abomasum, pneumonia, diarrhea)

**For the next 4 questions, please indicate your level of support (1 = very unsupportive, 5 = very supportive) for the following potential changes to FARM Version 4.0 that have been suggested by different stakeholders in the industry as they pertain to:**

#### **7. Program Design and Administration**

- Change the length of time a farm has to address a Mandatory Corrective Action Plan (MCAP) from 9 months to 6 months
- Require that second-party evaluators visit ALL facilities affiliated with a dairy farm (dry cow housing, calf facility, etc.) within a 50-mile radius of the primary milking facility
- Create a section of the evaluation that evaluates the condition of animals in the hospital pen
- Remove the standards that ask about the provision of feed to maintain “health, growth, and vigor” and solely rely on animal observations of body condition to evaluate whether animals are being fed appropriately

## 8. Practices & Protocols:

- Require that a farm's protocol for lameness prevention and treatment specifically includes that they will consult with a veterinarian
- Provide a specific definition of how quickly an animal must be euthanized once the decision to euthanize has been made (e.g. 4 hours as per American Association of Bovine Practitioners guidelines)
- Change the corrective action for farms that do not use pain control for disbudding from a Continuous Improvement Plan (must be met within 3 years) to an Mandatory Corrective Action Plan (must be met within 9 months)
- Require farms to only use pain control products that are recommended by the American Association of Bovine Practitioners
- Provide more specific guidance around the use of caustic paste as a method for disbudding
- Define expectations as to how producers should evaluate quality of colostrum

## 9. Additional Potential Standards:

- Introduce a new standard that provides minimum expectations for stocking density
- Include a standard that addresses fitness for transport of calves
- Include a standard that describes what is acceptable and unacceptable when using cattle prods, electric crowd gates, trainers
- Establish a minimum benchmark for the level of moderate lameness in the herd
- Require the use of pain mitigation for branding and/or castration

## 10. Animal-Based Measures

- Change the corrective action for farms that have extreme values of lameness/broken tails/emaciation from a Continuous Improvement Plan (must be met within 3 years) to an Mandatory Corrective Action Plan (must be met within 9 months)
- Modify the hygiene scoring standard to result in a Continuous Improvement Plan ( if the benchmark of 90% is not met)
- Reconsider the benchmark for broken tails (currently set at 95% of the herd with unbroken tails) and set it based on the results collected from the FARM Version 4.0 program
- Require that farms develop a corrective action plan to address moderate levels of lameness if the benchmark is not met

**11. Are there any other animal care issues that are not addressed in Version 4.0 of the FARM program that you feel must be included in Version 5.0? If yes, please briefly describe your answer:**  
*Textbox provided for written answers of up to 1000 characters in length.*

**12. Please provide any final comments you would like us to consider as they pertain to modifying the FARM Animal Care Version 4.0 Program to Version 5.0:**  
*Textbox provided for written answers of up to 500 characters in length.*