

Animal Welfare - Beef Cattle

Key Performance Indicators

Version 01.02



About the Animal Welfare - Beef Cattle Key Performance Indicators

This THESIS Performance Assessment provides in-depth key performance indicators for animal welfare issues for beef cattle.

The information you collect for these KPIs should cover all production you source from the U.S. and should not be specific to any buyer (e.g., retailer).

Remember to download the assessment documents to help you in completing the KPIs. Make sure to review the detailed guidance and resources for each KPI. Your work is saved automatically but not shared until you are ready.

Introduction

The Sustainability Insight System, THESIS, from The Sustainability Consortium (TSC) is a comprehensive and holistic solution for understanding environmental and social performance in consumer goods supply chains. These key performance indicators (KPIs) can be used to assess action, transparency, and continuous improvement on the material sustainability issues for brands, manufacturers, and producers.

TSC created this KPI set using its science-based, multi-stakeholder, and full life-cycle development process. TSC members and partners, including manufacturers, retailers, suppliers, service providers, NGOs, civil society organizations, governmental agencies, and academics, contributed valuable perspectives and expertise.

TSC is a global organization dedicated to improving the sustainability of consumer products that also offers a portfolio of services to help drive effective implementation. For more information please visit www.sustainabilityconsortium.org

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Key Performance Indicators

QUESTION	RESPONSE OPTION
<p>1. Animal Welfare Policy</p> <p>Does your organization publish a farm animal welfare policy?</p>	<p>A. We do not publish a formal policy statement on farm animal welfare.</p> <p>B. We publicly disclose a policy statement that contains a broad commitment to farm animal welfare.</p> <p>C. In addition to B, we publicly disclose how our commitment to farm animal welfare is implemented.</p>
<p>2. Animal Welfare Certifications and Audits - Beef Cattle Farming Stages</p> <p>What percentages of your beef supply came from farms that were covered by a current comprehensive animal welfare certification or by verifiable and regularly conducted second- or third-party animal welfare audits at the beef cattle farming stages?</p>	<p>A. We are unable to determine at this time.</p> <p>B. We are able to report the following for our beef supply:</p> <p>B1. _____% of our beef supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the non-finishing farm stages.</p> <p>B2. _____% of our beef supply had regular and verifiable third-party audits at the non-finishing farm stages.</p> <p>B3. _____% of our beef supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the finishing farm stage.</p> <p>B4. _____% of our beef supply had regular and verifiable third-party audits at the finishing farm stage.</p>
<p>3. Animal Welfare Certifications and Audits - Beef Cattle Transport and Slaughter</p> <p>What percentages of your beef supply were covered by a current comprehensive animal welfare certification or by verifiable and regularly conducted second or third-party animal welfare audits at the transportation and slaughter stage?</p>	<p>A. We are unable to determine at this time.</p> <p>B. We are able to report the following for our beef supply:</p> <p>B1. _____% of our beef supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second or third-party audits at the transportation stage.</p> <p>B2. _____% of our beef supply had regular and verifiable third-party audits at the transportation stage.</p> <p>B3. _____% of our beef supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second or third-party audits at the slaughter stage.</p> <p>B4. _____% of our beef supply had regular and verifiable third-party audits at the slaughter stage.</p>
<p>4. Stockperson Training - Beef Cattle</p> <p>What percentages of your beef supply came from finishing farms, transporters, and slaughter facilities that have documentation that those who are in contact with beef cattle are competent and trained in proper handling procedures?</p>	<p>A. We are unable to determine at this time.</p> <p>B. We are able to report the following for our beef supply:</p> <p>B1. _____% of our beef supply came from finishing farms that have documentation that those who are in contact with beef cattle are competent and trained in proper handling procedures.</p> <p>B2. _____% of our beef supply came from transporters that have documentation that those who are in contact with beef cattle are competent and trained in proper handling procedures.</p> <p>B3. _____% of our beef supply came from slaughter facilities that have documentation that those who are in contact with beef cattle are competent and trained in proper handling procedures.</p>
<p>5. Animal Health Management – Beef Finishing Farms</p> <p>What percentages of your beef supply came from finishing farms that have a verified veterinary-client-patient relationship, designated individual(s) in place to evaluate animal health and welfare, and an animal health performance monitoring system in place?</p>	<p>A. We are unable to determine at this time.</p> <p>B. We are able to report the following for our beef supply:</p> <p>B1. _____% of our beef supply came from finishing farms with a verified veterinary-client-patient relationship.</p> <p>B2. _____% of our beef supply came from finishing farms with designated individual(s) in place to evaluate animal health and welfare.</p> <p>B3. _____% of our beef supply came from finishing farms that have an animal health performance monitoring system in place.</p>



<p>6. Housing System Specifications - Beef Cattle Finishing</p> <p>What percentages of beef cattle at finishing farms in your supply chain are housed in a system that allows cattle to easily stand up, lie down, turn around, and adopt normal resting postures with visual eye contact with other cattle; gives cattle access to a lying area that provides comfort, insulation, warmth, dryness, and traction; provides cattle protection from heat and cold; and provides cattle with environmental enrichment?</p>	<p>A. We are unable to determine at this time.</p> <p>B. We are able to report the following for our supply:</p> <p>B1. _____% of beef cattle at finishing farms in our supply chain are housed in a system that allows cattle to easily stand up, lie down, turn around, and adopt normal resting postures with visual eye contact with other cattle.</p> <p>B2. _____% of beef cattle at finishing farms in our supply chain are housed in a system that gives cattle access to a lying area that provides comfort, insulation, warmth, dryness, and traction.</p> <p>B3. _____% of beef cattle at finishing farms in our supply chain are housed in a system that provides cattle protection from heat and cold.</p> <p>B4. _____% of beef cattle at finishing farms in our supply chain are housed in a system that provides cattle with environmental enrichment.</p>
<p>7. Lameness - Beef Cattle Finishing</p> <p>What percentage of beef cattle at finishing farms in your supply chain showed an adequate mobility score?</p>	<p>A. We are unable to determine at this time.</p> <p>B. We are able to report the following for our supply:</p> <p>B1. _____% of beef cattle at finishing farms showed an adequate mobility score.</p> <p>B2. _____% of our beef supply is represented by the number reported in B1.</p>
<p>8. Nutrition Management - Beef Cattle Finishing</p> <p>What percentages of your beef supply came from finishing farms that assess the nutritional status of beef cattle based on a body condition scoring system; consult a nutritionist for advice on ration formulation and feeding programs; and monitor changes in feces, incidence of acidosis and bloat, and foot health to evaluate the feeding program?</p>	<p>A. We are unable to determine at this time.</p> <p>B. We are able to report the following for our beef supply:</p> <p>B1. _____% of our beef supply came from finishing farms that assess the nutritional status of beef cattle based on a body condition scoring system.</p> <p>B2. _____% of our beef supply came from finishing farms that consult a nutritionist for advice on ration formulation and feeding programs.</p> <p>B3. _____% of our beef supply came from finishing farms that monitor changes in feces, incidence of acidosis and bloat, and foot health to evaluate the feeding program.</p>
<p>9. Outdoor Access Transparency - Beef Cattle Finishing</p> <p>What percentages of beef cattle at the finishing farms in your supply chain were housed in a system that does not provide cattle outdoor access or a system that provides cattle outdoor access primarily in pastures, concrete alleyways or pens, dry lots, or other forms of routine outdoor access?</p>	<p>A. We are unable to determine at this time.</p> <p>B. We are able to report the following for our supply:</p> <p>B1. _____% of beef cattle at the finishing farms in our supply chain were housed in a system that does not provide cattle outdoor access.</p> <p>B2. _____% of beef cattle at the finishing farms in our supply chain were housed in a system that provides cattle outdoor access primarily in pastures.</p> <p>B3. _____% of beef cattle at the finishing farms in our supply chain were housed in a system that provides cattle outdoor access primarily in concrete alleyways or pens.</p> <p>B4. _____% of beef cattle at the finishing farms in our supply chain were housed in a system that provides cattle outdoor access primarily in dry lots.</p> <p>B5. _____% of beef cattle at the finishing farms in our supply chain were housed in a system that provides cattle other forms of outdoor access.</p>
<p>10. Painful Procedures Management - Beef Cattle</p> <p>What percentages of your beef supply came from cattle that were not tail docked, branded, or disbudded and dehorned, and came from beef farms that have a standard operating procedure for disbudding and dehorning and castration?</p>	<p>A. We are unable to determine at this time.</p> <p>B. The following can be reported for our supply:</p> <p>B1. _____% of our beef supply came from cattle that were not tail docked.</p> <p>B2. _____% of our beef supply came from cattle that were not branded.</p> <p>B3. _____% of our beef supply came from cattle that were not disbudded and dehorned.</p> <p>B4. _____% of our beef supply came from beef farms that have a standard operating procedure for disbudding and dehorning.</p> <p>B5. _____% of our beef supply came from beef farms that have a standard operating procedure for castration.</p>
<p>11. Culling Management - Beef Cattle Finishing</p> <p>What percentages of your beef supply came from beef finishing farms that have a standard operating procedure for culling, and that track reasons for culling?</p>	<p>A. We are unable to determine at this time.</p> <p>B. We are able to report the following for our beef supply:</p> <p>B1. _____% of our beef supply came from finishing farms that have a standard operating procedure for culling.</p> <p>B2. _____% of our beef supply came from finishing farms that track the reasons for culling.</p>



<p>12. Mortality Rate – Beef Cattle Finishing What was the average mortality rate at the finishing farms in your supply chain?</p>	<p>A. We are unable to determine at this time. B. We are able to report the following for our supply: B1. _____ mortality rate. B2. _____% of our beef supply is represented by the number reported in B1.</p>
<p>13. Transportation to Slaughter - Beef Cattle What percentage of your beef suppliers publicly disclose a transportation plan that covers animal welfare and what was the average dead-on-arrival rate for beef cattle at slaughter facilities in your supply chain?</p>	<p>A. We are unable to determine at this time or our beef supply is not covered by a transportation plan that covers animal welfare. B. We are able to report the following for our supply: B1. _____% of our beef suppliers publicly disclose a transportation plan that specifies how animal welfare is covered during transportation to slaughter. B2. _____% of our beef supply is represented by the number reported in B1. B3. _____ dead-on-arrival rate per delivery. B4. _____% of our beef supply is represented by the number reported in B3.</p>
<p>14. Assessment at Slaughter - Beef Cattle What percent of cattle were non-ambulatory at slaughterhouse arrival and what percentage of your beef supply was dark, firm, and dry meat?</p>	<p>A. We are unable to determine at this time. B. We are able to report the following for our beef supply: B1. _____% of cattle were non-ambulatory at slaughterhouse arrival. B2. _____% of our beef supply is represented by the number reported in B1. B3. _____% of beef was dark, firm, and dry meat at slaughterhouse facilities. B4. _____% of our beef supply is represented by the number reported in B3.</p>
<p>15. Pre-Slaughter Stunning Transparency - Beef Cattle What percentages of your beef supply came from cattle that were effectively stunned before slaughter using captive bolt, electrical, or other methods of stunning?</p>	<p>A. Not applicable. The cattle in our supply chain are ritually slaughtered. B. We are unable to determine at this time. C. We are able to report the following for our beef supply: C1. _____% of our beef supply came from cattle that were effectively stunned with a captive bolt. C2. _____% of our beef supply came from cattle that were effectively electrically stunned. C3. _____% of our beef supply came from cattle that were effectively stunned prior to slaughter using other methods.</p>



Key Performance Indicators with Guidance

1. ANIMAL WELFARE POLICY

Question

Does your organization publish a farm animal welfare policy?

Response Options

- A.** We do not publish a formal policy statement on farm animal welfare.
- B.** We publicly disclose a policy statement that contains a broad commitment to farm animal welfare.
- C.** In addition to B, we publicly disclose how our commitment to farm animal welfare is implemented.

Guidance

Calculation & Scope

Respond with the option that most closely reflects your company's animal welfare policy.

For B, your company must publicly disclose a policy statement that contains a broad commitment to farm animal welfare. The policy must include no tolerance for abuse and a commitment to internationally recognized farm animal welfare principles, for example the OIE principles.

For C, in addition to B, your company must publicly disclose how your commitment to farm animal welfare is implemented and the policy must include the following: A clear statement on why animal welfare is important for your company, a commitment to comply with relevant legislation, a statement on expected farm animal welfare standards, a commitment to continuous improvement and public disclosure of animal welfare performance, and a description of the processes to ensure the effective implementation of your policy, for example senior management oversight, performance monitoring, or corrective actions.

This question aligns with the Business Benchmark on Farm Animal Welfare, listed in the Certifications, Standards & Tools. Other standards or tools may also be applicable.

Certifications, Standards & Tools

BBFAW Methodology Report 2015: The Business Benchmark on Farm Animal Welfare (BBFAW) Methodology Report 2015 provides an independent assessment of how 90 of the world's largest food companies are managing and reporting on farm animal welfare and assesses the progress that has been made for the period 2015 - 2016. BBFAW is designed to improve corporate reporting on farm animal welfare and drive tangible improvements in the farm animal welfare practices and performance.

<http://www.bbfaw.com/media/1318/bbfaw-methodology-report-2015.pdf>

Background Information

World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms".

<http://www.oie.int/en/standard-setting/terrestrial-code/access-online/>

Definitions

Animal welfare: Animal welfare refers to the well-being of an animal and how an animal is coping with the conditions in which it lives. A good state of welfare varies substantially between different contexts, but in general an animal is in a good state of welfare if it is healthy, comfortable, well-nourished, safe, able to express innate behavior, and not suffering from pain, fear, and distress. Ensuring animal welfare is a human responsibility that requires treatments such as good housing, good care, good feed, humane handling and humane slaughter/killing. The treatments that an animal receives is covered by other terms such as animal care, animal husbandry, and humane management (adapted from The World Organisation for Animal Health (OIE)).

Corrective actions: Prompt actions taken to eliminate the causes of a problem, thus preventing their recurrence.

Hotspots Addressed

1. Supply Chain Transparency





2. ANIMAL WELFARE CERTIFICATIONS AND AUDITS - BEEF CATTLE FARMING STAGES

Question

What percentages of your beef supply came from farms that were covered by a current comprehensive animal welfare certification or by verifiable and regularly conducted second- or third-party animal welfare audits at the beef cattle farming stages?

Response Options

- A. We are unable to determine at this time.
- B. We are able to report the following for our beef supply:
 - B1. _____% of our beef supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the non-finishing farm stages.
 - B2. _____% of our beef supply had regular and verifiable third-party audits at the non-finishing farm stages.
 - B3. _____% of our beef supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the finishing farm stage.
 - B4. _____% of our beef supply had regular and verifiable third-party audits at the finishing farm stage.

Guidance

Calculation & Scope

Calculate B1 as the mass of your beef supply that was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at non-finishing farm stages, divided by the total mass of your beef supply, then multiply by 100.

Calculate B2 as the mass of your beef supply that had regular and verifiable third-party audits at non-finishing farm stages, divided by the total mass of your beef supply, then multiply by 100.

Calculate B3 as the mass of your beef supply that was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the finishing farm stage, divided by the total mass of your beef supply, then multiply by 100.

Calculate B4 as the mass of your beef supply that had regular and verifiable third-party audits at the finishing farm stage, divided by the total mass of your beef supply, then multiply by 100.

Non-finishing farm stages include cow-calf operations, stocker/backgrounder operations, and dairy operations.

Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.

Government regulations or parties in the supply chain can initiate these audits. Regulations, audits, and certifications that align with the animal welfare standards as described in Section 7 of the World Organisation for Animal Health (OIE) Terrestrial Animal Health Code and are well-enforced by the implementation of auditing systems can be included in your calculations. See the Certifications, Standards & Tools for more information.

To be included in your response, as described by OIE, efforts should be taken to achieve minimization of pain, risk of injury, and transmission of diseases or parasites to animals; a physical environment in which the air quality, temperature, and humidity supports good animal health; a structural and social environment that allows animal to rest comfortably, provides opportunities for physical and cognitive activity, and allows for the opportunity to perform beneficial innate and positive behaviors.

Beef cattle should have access to sufficient water and appropriate feed and need to be free from hunger and thirst. Calves should be weaned only when their ruminant digestive system has developed sufficiently to enable them to maintain growth and welfare. The handling of animals should foster a positive relationship between humans and beef cattle and should not cause injury, panic, lasting fear, or avoidable stress.

Genetic selection should take into account the health and welfare of beef cattle.

Certifications, Standards & Tools

American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine.





http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements

Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death.

<https://agreenerworld.org/certifications/animal-welfare-approved/>

Beef & Lamb Quality Assurance Scheme (BLQAS): The Irish Bord Bia Beef and Lamb Quality Assurance Scheme is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product.

<https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/sustainable-beef-and-lamb-assurance-scheme-sblas/>

Beef Quality Assurance (BQA) Manual: The Beef Quality Assurance (BQA) Manual outlines science-based best management practices that provide a framework for cow-calf and stocker producers to ensure food safety and quality. The BQA program is a cooperative effort between beef producers, veterinarians, nutritionists, extension staff, and other professionals from veterinary medical associations and allied industries of farm animals.

<https://www.bqa.org/Media/BQA/Docs/nationalmanual.pdf>

Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals.

<https://certifiedhumane.org/how-we-work/our-standards/>

Dairy Animal Care and Quality Assurance (DACQA) Manual: Manual for animal care and quality assurance for dairy cows at the end of their productive lifetime.

<https://www.bqa.org/Media/BQA/Docs/dairybqamanual.pdf>

Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture.

<https://globalanimalpartnership.org/>

GlobalG.A.P. Integrated Farm Assurance Checklist for Calf and Young Beef: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CYB/

GlobalG.A.P. Integrated Farm Assurance Checklist for Cattle and Sheep: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CS/

List of Animal Welfare Programs: TSC has compiled a list of animal welfare standards, certifications, and programs. This list may assist users in choosing a program that fits their needs.

<https://www.sustainabilityconsortium.org/tsc-downloads/animal-welfare-organizations-and-programs/>

Professional Animal Auditor Certification Organization (PAACO): Professional Animal Auditor Certification Organization (PAACO) is an animal auditing and certification organization in the United States. PAACO promotes the humane treatment of animals through education and certification of animal auditors as well as the review and/or certification of animal audit instruments, assessments, and programs.

<https://animalauditor.org/>

Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Beef Cattle: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of beef cattle taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry.

<http://science.rspca.org.uk/sciencegroup/farmanimals/standards/beefcattle>

Background Information

Code of Practice for the Care and Handling of Beef Cattle: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of beef cattle.

http://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf



Code of Practice for the Welfare of Beef Cattle: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of beef cattle.

<http://www.fawac.ie/media/fawac/content/publications/animalwelfare/RevisedAnimalWelfareGuidelineforBeefFarmers2008.pdf>

Code of Recommendations for the Welfare of Cattle: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of cattle.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69368/pb7949-cattle-code-030407.pdf

World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms".

<http://www.oie.int/en/standard-setting/terrestrial-code/access-online/>

Definitions

Animal welfare: Animal welfare refers to the well-being of an animal and how an animal is coping with the conditions in which it lives. A good state of welfare varies substantially between different contexts, but in general an animal is in a good state of welfare if it is healthy, comfortable, well-nourished, safe, able to express innate behavior, and not suffering from pain, fear, and distress. Ensuring animal welfare is a human responsibility that requires treatments such as good housing, good care, good feed, humane handling and humane slaughter/killing. The treatments that an animal receives is covered by other terms such as animal care, animal husbandry, and humane management (adapted from The World Organisation for Animal Health (OIE)).

Finishing stage: The final stage of livestock production where full-feeding and final conditioning of an animal for slaughter takes place in order to ensure satisfactory muscle and fat revenues. This excludes breeding, cow-calf, and stocker farms.

Second-party audit: An audit conducted by a party having an interest in the organization, such as customers, or by another entity on their behalf.

Third-party audit: An audit conducted by external, independent auditing organizations, such as those providing certification of conformity to a standard.

Verifiable: Having the ability to demonstrate, through a reputable assessor, the truth or accuracy of a claim.

Hotspots Addressed

1. Supply Chain Transparency
2. Cow-Calf Management - Farm Stage



3. ANIMAL WELFARE CERTIFICATIONS AND AUDITS - BEEF CATTLE TRANSPORT AND SLAUGHTER

Question

What percentages of your beef supply were covered by a current comprehensive animal welfare certification or by verifiable and regularly conducted second or third-party animal welfare audits at the transportation and slaughter stage?

Response Options

- A. We are unable to determine at this time.
- B. We are able to report the following for our beef supply:
 - B1. _____% of our beef supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second or third-party audits at the transportation stage.
 - B2. _____% of our beef supply had regular and verifiable third-party audits at the transportation stage.
 - B3. _____% of our beef supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second or third-party audits at the slaughter stage.
 - B4. _____% of our beef supply had regular and verifiable third-party audits at the slaughter stage.

Guidance

Calculation & Scope

Calculate B1 as the mass of your beef supply that was covered by a current comprehensive animal welfare certification OR had regular and verifiable second or third-party audits at the transportation stage, divided by the total mass of your beef supply, then multiply by 100.

Calculate B2 as the mass of your beef supply that had regular and verifiable third-party audits at the transportation stage, divided by the total mass of your beef supply, then multiply by 100.

Calculate B3 as the mass of your beef supply that was covered by a current comprehensive animal welfare certification OR had regular and verifiable second or third-party audits at the slaughter stage, divided by the total mass of your beef supply, then multiply by 100.

Calculate B4 as the mass of your beef supply that had regular and verifiable third-party audits at the slaughter stage, divided by the total mass of your beef supply, then multiply by 100.

Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.

Government regulations or parties in the supply chain can initiate these audits. Regulations, audits, and certifications that align with the animal welfare standards as described in Section 7 of the World Organisation for Animal Health (OIE) Terrestrial Animal Health Code and are well-enforced by the implementation of auditing systems can be included in your calculations. See the Certifications, Standards & Tools for more information.

To be included in B1 or B2, as described by OIE, beef cattle should not be transported if they are not fit to travel. For those animals fit to travel, the number of journeys and the length of time should be minimized. Loading and unloading procedures should minimize animal stress, prevent injury, and use facilities that promote calm and safe animal movement. Protection from extreme temperatures and other extreme weather conditions is provided. Adequate feed and water is available when required.

To be included in B3 or B4, as described by OIE, beef cattle should be treated humanely before and during all slaughter procedures, including pre-slaughter stunning for non-ritual slaughter. The pre-slaughter stunning must render the animal insensible to pain until death occurs. The minimization of fear, stress, and pain is included in humane treatment.



Certifications, Standards & Tools

American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine.

http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements

Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death.

<https://agreenerworld.org/certifications/animal-welfare-approved/>

Australian Animal Welfare Standards and Guidelines for Land Transport: The Australian Department of Agriculture, Fisheries and Forestry provides a standard for land transport of livestock.

<http://www.animalwelfarestandards.net.au/land-transport/>

Beef & Lamb Quality Assurance Scheme (BLQAS): The Irish Bord Bia Beef and Lamb Quality Assurance Scheme is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product.

<https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/sustainable-beef-and-lamb-assurance-scheme-sbias/>

Beef Quality Assurance (BQA) Manual: The Beef Quality Assurance (BQA) Manual outlines science-based best management practices that provide a framework for cow-calf and stocker producers to ensure food safety and quality. The BQA program is a cooperative effort between beef producers, veterinarians, nutritionists, extension staff, and other professionals from veterinary medical associations and allied industries of farm animals.

<https://www.bqa.org/Media/BQA/Docs/nationalmanual.pdf>

Beef Quality Assurance (BQA) The Master Cattle Transporter program: This BQA program provides guidelines on transportation of beef cattle.

https://www.bqa.org/media/bqa/docs/master_cattle_transporter_guide-digital.pdf

Dairy Animal Care and Quality Assurance (DACQA) Manual: Manual for animal care and quality assurance for dairy cows at the end of their productive lifetime.

<https://www.bqa.org/Media/BQA/Docs/dairybqamannual.pdf>

GlobalG.A.P. Integrated Farm Assurance Checklist for Calf and Young Beef: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CYB/

GlobalG.A.P. Integrated Farm Assurance Checklist for Cattle and Sheep: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

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List of Animal Welfare Programs: TSC has compiled a list of animal welfare standards, certifications, and programs. This list may assist users in choosing a program that fits their needs.

<https://www.sustainabilityconsortium.org/tsc-downloads/animal-welfare-organizations-and-programs/>

Professional Animal Auditor Certification Organization (PAACO): Professional Animal Auditor Certification Organization (PAACO) is an animal auditing and certification organization in the United States. PAACO promotes the humane treatment of animals through education and certification of animal auditors as well as the review and/or certification of animal audit instruments, assessments, and programs.

<https://animalauditor.org/>

Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Beef Cattle: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of beef cattle taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry.

<http://science.rspca.org.uk/sciencegroup/farmanimals/standards/beefcattle>

Background Information

Code of Practice for the Care and Handling of Beef Cattle: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of beef cattle.





http://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf

Code of Practice for the Transport of Animals: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of farm animals during transport.

https://www.nfacc.ca/pdfs/codes/pig_code_of_practice.pdf

Code of Practice for the Welfare of Beef Cattle: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of beef cattle.

<http://www.fawac.ie/media/fawac/content/publications/animalwelfare/RevisedAnimalWelfareGuidelineforBeefFarmers2008.pdf>

Code of Recommendations for the Welfare of Cattle: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of cattle.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69368/pb7949-cattle-code-030407.pdf

Online Guide on Transport of Livestock: The Humane Slaughter Organization in the United Kingdom provides information on issues, considerations, and best practices in transport and slaughter of livestock.

<http://www.hsa.org.uk/transport-of-livestock-introduction/introduction-8>

World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms".

<http://www.oie.int/en/standard-setting/terrestrial-code/access-online/>

Definitions

Animal welfare: Animal welfare refers to the well-being of an animal and how an animal is coping with the conditions in which it lives. A good state of welfare varies substantially between different contexts, but in general an animal is in a good state of welfare if it is healthy, comfortable, well-nourished, safe, able to express innate behavior, and not suffering from pain, fear, and distress. Ensuring animal welfare is a human responsibility that requires treatments such as good housing, good care, good feed, humane handling and humane slaughter/killing. The treatments that an animal receives is covered by other terms such as animal care, animal husbandry, and humane management (adapted from The World Organisation for Animal Health (OIE)).

Second-party audit: An audit conducted by a party having an interest in the organization, such as customers, or by another entity on their behalf.

Third-party audit: An audit conducted by external, independent auditing organizations, such as those providing certification of conformity to a standard.

Verifiable: Having the ability to demonstrate, through a reputable assessor, the truth or accuracy of a claim.

Hotspots Addressed

1. Supply Chain Transparency



4. STOCKPERSON TRAINING - BEEF CATTLE

Question

What percentages of your beef supply came from finishing farms, transporters, and slaughter facilities that have documentation that those who are in contact with beef cattle are competent and trained in proper handling procedures?

Response Options

- A. We are unable to determine at this time.
- B. We are able to report the following for our beef supply:
 - B1. _____% of our beef supply came from finishing farms that have documentation that those who are in contact with beef cattle are competent and trained in proper handling procedures.
 - B2. _____% of our beef supply came from transporters that have documentation that those who are in contact with beef cattle are competent and trained in proper handling procedures.
 - B3. _____% of our beef supply came from slaughter facilities that have documentation that those who are in contact with beef cattle are competent and trained in proper handling procedures.

Guidance

Calculation & Scope

Calculate B1 as the mass of your beef supply that came from finishing farms that have documentation that those who are in contact with beef cattle are competent and trained in proper handling procedures, divided by the total mass of your beef supply, then multiply by 100.

Calculate B2 as the mass of your beef supply that came from transporters that have documentation that those who are in contact with beef cattle are competent and trained in proper handling procedures, divided by the total mass of your beef supply, then multiply by 100.

Calculate B3 as the mass of your beef supply that came from slaughter facilities that have documentation that those who are in contact with beef cattle are competent and trained in proper handling procedures, divided by the total mass of your beef supply, then multiply by 100.

The training program and accompanying documentation must include, but not be limited to facility requirements, humane animal handling, animal behavior, and injury and disease detection. Examples of implementation of these criteria by all stockpersons are understanding the physical and environmental requirements for cattle, understanding stress factors such as other cattle, personnel, strange noises, sights, sounds, and smells, recognizing common diseases, illnesses, and injuries, and recognizing normal cattle activity and behavior. Additional training may be required for monitoring individual cow health, proper equipment use, newborn calf management, or for outside workers such as transporters and foot trimmers. See the Certifications, Standards & Tools for examples of initiatives that meet these requirements.

Initial training is necessary to perform job duties. Training must be renewed as appropriate to maintain competency and implementation of good practices (not necessarily on an annual basis) and to prevent training exhaustion. See the Background Information for further reading on the relation between stockperson training and animal welfare.

If you are unable obtain data or otherwise determine your response to a response option, enter zero percent. Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.

Certifications, Standards & Tools

American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine.
http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements

Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death.
<https://agreenerworld.org/certifications/animal-welfare-approved/>

Australian Animal Welfare Standards and Guidelines for Land Transport: The Australian Department of Agriculture, Fisheries and Forestry provides a standard for land transport of livestock.





<http://www.animalwelfarestandards.net.au/land-transport/>

Beef & Lamb Quality Assurance Scheme (BLQAS): The Irish Bord Bia Beef and Lamb Quality Assurance Scheme is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product.

<https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/sustainable-beef-and-lamb-assurance-scheme-sblas/>

Beef Quality Assurance (BQA) Manual: The Beef Quality Assurance (BQA) Manual outlines science-based best management practices that provide a framework for cow-calf and stocker producers to ensure food safety and quality. The BQA program is a cooperative effort between beef producers, veterinarians, nutritionists, extension staff, and other professionals from veterinary medical associations and allied industries of farm animals.

<https://www.bqa.org/Media/BQA/Docs/nationalmanual.pdf>

Beef Quality Assurance (BQA) The Master Cattle Transporter program: This BQA program provides guidelines on transportation of beef cattle.

https://www.bqa.org/media/bqa/docs/master_cattle_transporter_guide-digital.pdf

Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals.

<https://certifiedhumane.org/how-we-work/our-standards/>

Dairy Animal Care and Quality Assurance (DACQA) Manual: Manual for animal care and quality assurance for dairy cows at the end of their productive lifetime.

<https://www.bqa.org/Media/BQA/Docs/dairybqamanual.pdf>

Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture.

<https://globalanimalpartnership.org/>

GlobalG.A.P. Integrated Farm Assurance Checklist for Calf and Young Beef: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CYB/

GlobalG.A.P. Integrated Farm Assurance Checklist for Cattle and Sheep: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CS/

Professional Animal Auditor Certification Organization (PAACO): Professional Animal Auditor Certification Organization (PAACO) is an animal auditing and certification organization in the United States. PAACO promotes the humane treatment of animals through education and certification of animal auditors as well as the review and/or certification of animal audit instruments, assessments, and programs.

<https://animalauditor.org/>

Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Beef Cattle: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of beef cattle taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry.

<http://science.rspca.org.uk/sciencegroup/farmanimals/standards/beefcattle>

Background Information

Code of Practice for the Care and Handling of Beef Cattle: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of beef cattle.

http://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf

Code of Practice for the Transport of Animals: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of farm animals during transport.

https://www.nfacc.ca/pdfs/codes/pig_code_of_practice.pdf

Code of Practice for the Welfare of Beef Cattle: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of beef cattle.



<http://www.fawac.ie/media/fawac/content/publications/animalwelfare/RevisedAnimalWelfareGuidelineforBeefFarmers2008.pdf>

Code of Recommendations for the Welfare of Cattle: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of cattle.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69368/pb7949-cattle-code-030407.pdf

Online Guide on Transport of Livestock: The Humane Slaughter Organization in the United Kingdom provides information on issues, considerations, and best practices in transport and slaughter of livestock.

<http://www.hsa.org.uk/transport-of-livestock-introduction/introduction-8>

Stockperson Training and Animal Welfare: This Revue Scientifique et Technique provides a paper titled: Training to improve stockperson beliefs and behavior towards livestock enhances welfare and productivity.

<https://www.oie.int/doc/ged/D13660.PDF>

World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms".

<http://www.oie.int/en/standard-setting/terrestrial-code/access-online/>

Definitions

Finishing stage: The final stage of livestock production where full-feeding and final conditioning of an animal for slaughter takes place in order to ensure satisfactory muscle and fat revenues. This excludes breeding, cow-calf, and stocker farms.

Stockperson: A professional manager of animals. A stockperson's attitude and behavior effects animal welfare and productivity.

Hotspots Addressed

4. Animal Handling - Farm Stage

9. Animal Handling - Slaughter Stage

10. Animal Handling - Transportation Stage



5. ANIMAL HEALTH MANAGEMENT – BEEF FINISHING FARMS

Question

What percentages of your beef supply came from finishing farms that have a verified veterinary-client-patient relationship, designated individual(s) in place to evaluate animal health and welfare, and an animal health performance monitoring system in place?

Response Options

- A. We are unable to determine at this time.
- B. We are able to report the following for our beef supply:
 - B1. _____% of our beef supply came from finishing farms with a verified veterinary-client-patient relationship.
 - B2. _____% of our beef supply came from finishing farms with designated individual(s) in place to evaluate animal health and welfare.
 - B3. _____% of our beef supply came from finishing farms that have an animal health performance monitoring system in place.

Guidance

Calculation & Scope

Calculate B1 as the mass of your beef supply that came from finishing farms with a verified veterinary-client-patient relationship, divided by the total mass of your beef supply, then multiply by 100. To be included in B1, a veterinary-client-patient relationship must meet the criteria of the American Veterinary Medical Association or the European Platform for the Responsible Use of Medicines in Animals. See the Certifications, Standards & Tools for more details.

Calculate B2 as the mass of your beef supply that came from finishing farms with designated individual(s) in place to evaluate animal health and welfare, divided by the total mass of your beef supply, then multiply by 100. A designated individual must have the skills to evaluate animal health and welfare and be verifiably trained and experienced in managing beef cattle health and welfare. Evaluation of animal health and welfare includes herd activity and behavior, prevalence of diseases, injury detection, and availability of water and feed. An example is animal caretakers having a signed cow care agreement.

Calculate B3 as the mass of your beef supply that came from finishing farms with an animal health performance monitoring system in place, divided by the total mass of your beef supply, then multiply by 100. Animal health monitoring systems should include monitoring the prevalence of disease and incidence of injuries and evaluation of data for information that can be integrated into management and communication with animal care teams (including veterinarians). An animal health performance monitoring system includes metrics on production performance, incidence of common injuries, and prevalence of diseases. See the Background Information for factsheets that include a list of common diseases and injuries in beef cattle.

If you are unable obtain data or otherwise determine your response to a response option, enter zero percent. Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.

Certifications, Standards & Tools

American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine.

http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements

American Veterinary Medical Association: The American Veterinary Medical Association (AVMA) licenses and regulates the Veterinarian-Client-Patient Relationship (VCPR), which is defined in AVMA Principles of Veterinary Medical Ethics. The VCPR is an essential basis for interaction between veterinarians, their clients, and their patients and is critical to providing quality veterinary care.

<https://www.avma.org/resources-tools/pet-owners/petcare/veterinarian-client-patient-relationship-vcpr>

Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death.

<https://agreenworld.org/certifications/animal-welfare-approved/>



Beef & Lamb Quality Assurance Scheme (BLQAS): The Irish Bord Bia Beef and Lamb Quality Assurance Scheme is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product.

<https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/sustainable-beef-and-lamb-assurance-scheme-sblas/>

Beef Quality Assurance (BQA) Manual: The Beef Quality Assurance (BQA) Manual outlines science-based best management practices that provide a framework for cow-calf and stocker producers to ensure food safety and quality. The BQA program is a cooperative effort between beef producers, veterinarians, nutritionists, extension staff, and other professionals from veterinary medical associations and allied industries of farm animals.

<https://www.bqa.org/Media/BQA/Docs/nationalmanual.pdf>

Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals.

<https://certifiedhumane.org/how-we-work/our-standards/>

Dairy Animal Care and Quality Assurance (DACQA) Manual: Manual for animal care and quality assurance for dairy cows at the end of their productive lifetime.

<https://www.bqa.org/Media/BQA/Docs/dairybqamanual.pdf>

European Platform for the Responsible Use of Medicines in Animals: The European Platform for the Responsible Use of Medicines in Animals is a multi-stakeholder platform linking best practice with animal health and public health and aims to promote the responsible use of medicines in animals in the European Union.

<https://www.epruma.eu/>

Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture.

<https://globalanimalpartnership.org/>

GlobalG.A.P. Integrated Farm Assurance Checklist for Calf and Young Beef: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CYB/

GlobalG.A.P. Integrated Farm Assurance Checklist for Cattle and Sheep: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CS/

Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Beef Cattle: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of beef cattle taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry.

<http://science.rspca.org.uk/sciencegroup/farmanimals/standards/beefcattle>

Welfare Quality, Science and Society Improving Animal Welfare: The European Welfare Quality project provides protocols for measuring animal welfare for cattle, pigs, and poultry.

<http://www.welfarequalitynetwork.net/en-us/reports/assessment-protocols/>

Background Information

Cattle Disease Factsheets Australia: Inventory of most common cattle health and diseases in Australia.

<https://www.dpi.nsw.gov.au/animals-and-livestock/beef-cattle/health-and-disease>

Cattle Disease Factsheets USA: Inventory of 140 diseases in dairy and beef cattle. The factsheets contain information on causes, treatment and prevention.

<http://www.thecattlesite.com/diseaseinfo/>

Cattle Disease Prevention and Cattle Health Protection: Guidance on the main diseases that affect cattle, disease prevention, and legal controls in place to protect cattle health in the United Kingdom.

<https://www.gov.uk/guidance/cattle-health#cattle-diseases>

Code of Practice for the Care and Handling of Beef Cattle: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of beef cattle.



http://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf

Code of Practice for the Welfare of Beef Cattle: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of beef cattle.

<http://www.fawac.ie/media/fawac/content/publications/animalwelfare/RevisedAnimalWelfareGuidelineforBeefFarmers2008.pdf>

Code of Recommendations for the Welfare of Cattle: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of cattle.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69368/pb7949-cattle-code-030407.pdf

Federation of Veterinarians of Europe - Herd Health Plan: The Federation of Veterinarians of Europe provides a policy paper that outlines objectives and benefits of a Herd Health Plan (HHP) for farms. A HHP aims to enhance animal health and welfare and quality of products by decreasing the use of veterinary medicinal products and feed additives and properly planning preventative healthcare. This paper also provides guidelines for the prevention of epizootics and zoonotic diseases and information about good husbandry practices.

<https://www.fve.org/publications/herd-health-plan/>

World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms".

<https://www.oie.int/en/standard-setting/terrestrial-code/access-online/>

Definitions

Animal health program: A farm-specific plan for how to maintain and improve animal health and welfare written and regularly updated by the farmer together with a veterinarian and other relevant technical advisors.

Finishing stage: The final stage of livestock production where full-feeding and final conditioning of an animal for slaughter takes place in order to ensure satisfactory muscle and fat revenues. This excludes breeding, cow-calf, and stocker farms.

Verifiable: Having the ability to demonstrate, through a reputable assessor, the truth or accuracy of a claim.

Veterinarian-Client-Patient Relationship (VCPR): A cooperative relationship between a veterinarian, a client and the patient. A VCPR is an essential basis for interaction between veterinarians and their clients and is critical to providing quality veterinary care. Veterinarians and their clients may choose to establish a VCPR, and to decide on veterinary medical care under the terms of the VCPR. The American Veterinary Medical Association (AVMA) licenses and regulates the VCPR in the US, which is defined in AVMA Principles of Veterinary Medical Ethics.

Hotspots Addressed

1. Supply Chain Transparency
4. Animal Handling - Farm Stage
8. Health Management - Farm Stage



6. HOUSING SYSTEM SPECIFICATIONS - BEEF CATTLE FINISHING

Question

What percentages of beef cattle at finishing farms in your supply chain are housed in a system that allows cattle to easily stand up, lie down, turn around, and adopt normal resting postures with visual eye contact with other cattle; gives cattle access to a lying area that provides comfort, insulation, warmth, dryness, and traction; provides cattle protection from heat and cold; and provides cattle with environmental enrichment?

Response Options

- A. We are unable to determine at this time.
- B. We are able to report the following for our supply:
 - B1. _____% of beef cattle at finishing farms in our supply chain are housed in a system that allows cattle to easily stand up, lie down, turn around, and adopt normal resting postures with visual eye contact with other cattle.
 - B2. _____% of beef cattle at finishing farms in our supply chain are housed in a system that gives cattle access to a lying area that provides comfort, insulation, warmth, dryness, and traction.
 - B3. _____% of beef cattle at finishing farms in our supply chain are housed in a system that provides cattle protection from heat and cold.
 - B4. _____% of beef cattle at finishing farms in our supply chain are housed in a system that provides cattle with environmental enrichment.

Guidance

Calculation & Scope

Insights in production systems are important for animal welfare assessments as they determine the preconditions for adequate welfare. From the perspective of transparency and data availability, information on housing is often easier to assemble than data on the actual outcome, measured at the animal. However, information on the production system alone cannot be used as a complete proxy for animal welfare. Amongst others, factors such as the farmers' management, training and education, climate, and genetics affect animal welfare as well. This THESIS KPI set aims to provide a set of KPIs that is balanced between management, housing, and animal-based metrics.

Calculate B1 as the average percentage of beef cattle at finishing farms in your supply chain are housed in a system that allows cattle to easily stand up, lie down, turn around, and adopt normal resting postures with visual eye contact with other cattle, weighted by the mass of beef supplied by each finishing farm. For each finishing farm, calculate the number of cattle that are allowed to easily stand up, lie down, turn around, and adopt normal resting postures with visual eye contact with other cattle, divided by the total number of beef cattle, then multiply by 100. To be included in B1, the stocking density must be managed such that weight gain and duration of time spent lying is not adversely affected by crowding.

Calculate B2 as the average percentage of beef cattle at finishing farms in your supply chain are housed in a system that gives cattle access to a lying area that provide comfort, insulation, warmth, dryness, and traction, weighted by the mass of beef supplied by each finishing farm. For each finishing farm, calculate the number of cattle that are given access to a lying area that provide comfort, insulation, warmth, dryness, and traction, divided by the total number of beef cattle, then multiply by 100.

Calculate B3 as the average percentage of beef cattle at finishing farms in your supply chain are housed in a system that provides cattle protection from heat and cold, weighted by the mass of beef supplied by each finishing farm. For each finishing farm, calculate the number of cattle that are provided protection from heat and cold, divided by the total number of beef cattle, then multiply by 100. Tools to provide protection include providing shade, fans, sprinklers, and windbreakers.

Calculate B4 as the average percentage of beef cattle at finishing farms in your supply chain are housed in a system that provides cattle with environmental enrichment, weighted by the mass of beef supplied by each dairy farm. For each finishing farm, calculate the number of beef cattle that are provided with environmental enrichment, divided by the total number of beef cattle, then multiply by 100. Examples of environmental enrichment include scratching posts, cow brushes, or other equipment for grooming.

If you are unable obtain data or otherwise determine your response to a response option, enter zero percent. Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.



Certifications, Standards & Tools

American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine.

http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements

Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death.

<https://agreenerworld.org/certifications/animal-welfare-approved/>

Beef & Lamb Quality Assurance Scheme (BLQAS): The Irish Bord Bia Beef and Lamb Quality Assurance Scheme is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product.

<https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/sustainable-beef-and-lamb-assurance-scheme-sblas/>

Beef Quality Assurance (BQA) Manual: The Beef Quality Assurance (BQA) Manual outlines science-based best management practices that provide a framework for cow-calf and stocker producers to ensure food safety and quality. The BQA program is a cooperative effort between beef producers, veterinarians, nutritionists, extension staff, and other professionals from veterinary medical associations and allied industries of farm animals.

<https://www.bqa.org/Media/BQA/Docs/nationalmanual.pdf>

Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals.

<https://certifiedhumane.org/how-we-work/our-standards/>

Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture.

<https://globalanimalpartnership.org/>

GlobalG.A.P. Integrated Farm Assurance Checklist for Cattle and Sheep: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CS/

GlobalG.A.P. Integrated Farm Assurance Checklist for Dairy Cattle: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the dairy supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/DY/

Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Beef Cattle: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of beef cattle taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry.

<http://science.rspca.org.uk/sciencegroup/farmanimals/standards/beefcattle>

Background Information

Code of Practice for the Care and Handling of Beef Cattle: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of beef cattle.

http://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf

Code of Practice for the Welfare of Beef Cattle: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of beef cattle.

<http://www.fawac.ie/media/fawac/content/publications/animalwelfare/RevisedAnimalWelfareGuidelineforBeefFarmers2008.pdf>

Code of Recommendations for the Welfare of Cattle: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of cattle.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69368/pb7949-cattle-code-030407.pdf



Definitions

Finishing stage: The final stage of livestock production where full-feeding and final conditioning of an animal for slaughter takes place in order to ensure satisfactory muscle and fat revenues. This excludes breeding, cow-calf, and stocker farms.

Hotspots Addressed

- 1. Supply Chain Transparency*
 - 3. Housing - Farm Stage*
 - 6. Health & Injuries - Farm Stage*
-



7. LAMENESS - BEEF CATTLE FINISHING

Question

What percentage of beef cattle at finishing farms in your supply chain showed an adequate mobility score?

Response Options

- A. We are unable to determine at this time.
- B. We are able to report the following for our supply:
 - B1. _____% of beef cattle at finishing farms showed an adequate mobility score.
 - B2. _____% of our beef supply is represented by the number reported in B1.

Guidance

Calculation & Scope

Calculate B1 as the average percentage of beef cattle at finishing farms in your supply chain that showed an adequate mobility score, weighted by the mass of beef supplied by each finishing farm. For each finishing farm, calculate the percentage of beef cattle that showed an adequate mobility score as the number of beef cattle with an adequate mobility score, divided by the number of beef cattle scored, then multiply by 100.

To be included in B1, the mobility score must be equivalent to a mobility score of 1 or 2 based on the American Meat Institute scoring method in the United States. A mobility score of 1 indicates normal walking behavior, a score of 2 indicates some signs of lameness, but the animal keeps up with other cattle. Globally, multiple mobility, lameness, or locomotion scoring systems are applied. The essence of all these scoring systems is that an animal's lameness injury is monitored. See the Certifications, Standards & Tools for examples of mobility scoring cards from around the world.

If primary farm data are unavailable for any of your supply, you may use a regional estimate to answer B1. Do not combine primary data and regional estimates. To answer B1 using regional estimates, you should only use estimates from a sub-country area such as an agricultural zone or region, eco-region, or geo-political boundary (e.g., state, county, department) where the animal farm operations are located. A regional estimate must be based on a study that is representative of the production system, based on production data not older than 3 years and published in a publicly available document.

Calculate B2 as the mass of beef supply for which you were able to obtain data, divided by the total mass of your beef supply, then multiply by 100. If you have reported regional estimates for B1, then report 0% for B2.

Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.

Certifications, Standards & Tools

Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death.

<https://agreenworld.org/certifications/animal-welfare-approved/>

Beef & Lamb Quality Assurance Scheme (BLQAS): The Irish Bord Bia Beef and Lamb Quality Assurance Scheme is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product.

<https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/sustainable-beef-and-lamb-assurance-scheme-sblas/>

Cattle lameness grading systems: Lameness scoring systems can be used assess the severity of cattle lameness and are helpful for classifying lameness and monitoring responses to treatment.

<https://www.zinpro.com/lameness/beef>

Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals.

<https://certifiedhumane.org/how-we-work/our-standards/>

Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture.

<https://globalanimalpartnership.org/>





Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Beef Cattle: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of beef cattle taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry.
<http://science.rspca.org.uk/sciencegroup/farmanimals/standards/beefcattle>

Welfare Quality, Science and Society Improving Animal Welfare: The European Welfare Quality project provides protocols for measuring animal welfare for cattle, pigs, and poultry.
<http://www.welfarequalitynetwork.net/en-us/reports/assessment-protocols/>

Background Information

Code of Practice for the Care and Handling of Beef Cattle: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of beef cattle.
http://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf

Code of Practice for the Welfare of Beef Cattle: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of beef cattle.
<http://www.fawac.ie/media/fawac/content/publications/animalwelfare/RevisedAnimalWelfareGuidelineforBeefFarmers2008.pdf>

Code of Recommendations for the Welfare of Cattle: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of cattle.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69368/pb7949-cattle-code-030407.pdf

Lameness in Dairy and Beef Herds: Provides guidance for lameness at both the herd and individual level.
http://www.aabp.org/resources/aabp_guidelines/lamenessguidelines-03-11-2014.pdf

World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms".
<http://www.oie.int/en/standard-setting/terrestrial-code/access-online/>

Definitions

Adequate: Sufficient to satisfy a requirement or meet a need.

Finishing stage: The final stage of livestock production where full-feeding and final conditioning of an animal for slaughter takes place in order to ensure satisfactory muscle and fat revenues. This excludes breeding, cow-calf, and stocker farms.

Hotspots Addressed

1. Supply Chain Transparency
6. Health & Injuries - Farm Stage
8. Health Management - Farm Stage



8. NUTRITION MANAGEMENT - BEEF CATTLE FINISHING

Question

What percentages of your beef supply came from finishing farms that assess the nutritional status of beef cattle based on a body condition scoring system; consult a nutritionist for advice on ration formulation and feeding programs; and monitor changes in feces, incidence of acidosis and bloat, and foot health to evaluate the feeding program?

Response Options

- A. We are unable to determine at this time.
- B. We are able to report the following for our beef supply:
 - B1. _____% of our beef supply came from finishing farms that assess the nutritional status of beef cattle based on a body condition scoring system.
 - B2. _____% of our beef supply came from finishing farms that consult a nutritionist for advice on ration formulation and feeding programs.
 - B3. _____% of our beef supply came from finishing farms that monitor changes in feces, incidence of acidosis and bloat, and foot health to evaluate the feeding program.

Guidance

Calculation & Scope

Calculate B1 as the mass of your beef supply that came from finishing farms that assess the nutritional status of beef cattle based on a body condition scoring system, divided by the total mass of your beef supply, then multiply by 100. See the Background Information for references to body condition scoring systems applicable to beef cattle.

Calculate B2 as the mass of your beef supply that came from finishing farms that consult a nutritionist for advice on ration formulation and feeding programs, divided by the total mass of your beef supply, then multiply by 100. A nutritionist is a person with expertise on the field of beef cattle welfare and nutrition. Examples of nutritionists include private consultants, universities, and feed company employees.

Calculate B3 as the mass of your beef supply that came from finishing farms that monitor changes in feces, incidence of acidosis and bloat, and foot health to evaluate the feeding program, divided by the total mass of your beef supply, then multiply by 100.

If you are unable obtain data or otherwise determine your response to a response option, enter zero percent. Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.

Certifications, Standards & Tools

American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine.
http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements

Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death.
<https://agreenerworld.org/certifications/animal-welfare-approved/>

Beef & Lamb Quality Assurance Scheme (BLQAS): The Irish Bord Bia Beef and Lamb Quality Assurance Scheme is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product.
<https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/sustainable-beef-and-lamb-assurance-scheme-sblas/>

Beef Quality Assurance (BQA) Manual: The Beef Quality Assurance (BQA) Manual outlines science-based best management practices that provide a framework for cow-calf and stocker producers to ensure food safety and quality. The BQA program is a cooperative effort between beef producers, veterinarians, nutritionists, extension staff, and other professionals from veterinary medical associations and allied industries of farm animals.
<https://www.bqa.org/Media/BQA/Docs/nationalmanual.pdf>

Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals.
<https://certifiedhumane.org/how-we-work/our-standards/>





Dairy Animal Care and Quality Assurance (DACQA) Manual: Manual for animal care and quality assurance for dairy cows at the end of their productive lifetime.

<https://www.bqa.org/Media/BQA/Docs/dairybqamanual.pdf>

Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture.

<https://globalanimalpartnership.org/>

GlobalG.A.P. Integrated Farm Assurance Checklist for Cattle and Sheep: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CS/

Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Beef Cattle: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of beef cattle taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry.

<http://science.rspca.org.uk/sciencegroup/farmanimals/standards/beefcattle>

Background Information

Body Condition Scoring Beef Cows: A peer-reviewed article discussing using a Body Condition Scoring system as an important managerial tool for assessing production efficiency for beef cows.

<https://www.pubs.ext.vt.edu/400/400-795/400-795.html>

Body Condition Scoring Instructions: Canadian Beef Cattle Research Council provides an instruction guide for Body Condition Scoring for beef cows.

<http://www.beefresearch.ca/research/body-condition-scoring.cfm>

Body Condition Scoring Your Beef Cow Herd: A peer-reviewed article discussing body condition scores, relative to fatness or body condition of a cow herd.

<https://beef.unl.edu/learning/condition1a.shtml>

Bovine Medicine: Book on cattle practice, management and professional skills, clinical skills, and herd health.

<https://www.wiley.com/en-us/Bovine+Medicine%2C+3rd+Edition-p-9781444336436>

Code of Practice for the Care and Handling of Beef Cattle: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of beef cattle.

http://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf

Code of Practice for the Welfare of Beef Cattle: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of beef cattle.

<http://www.fawac.ie/media/fawac/content/publications/animalwelfare/RevisedAnimalWelfareGuidelineforBeefFarmers2008.pdf>

Code of Recommendations for the Welfare of Cattle: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of cattle.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69368/pb7949-cattle-code-030407.pdf

Nutrient Requirements of Beef Cattle: Report discussing the nutrient requirements of beef cattle with tables which list the nutrient requirements of beef cattle.

<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-1921/E-974web.pdf>

Nutrition and the Welfare of Farm Animals: Book on the nutrition and welfare of farm animals.

https://link.springer.com/chapter/10.1007/978-3-319-27356-3_8

Paper on Acidosis in Cattle: A peer-reviewed paper on acidosis in cattle.

<http://dx.doi.org/10.2527/1998.761275x>

Paper on beef cattle welfare in the USA: A peer-reviewed paper titled: Beef cattle welfare in the USA: identification of priorities for future research.

<http://dx.doi.org/10.1017/S1466252315000171>



Welfare Quality, Science and Society Improving Animal Welfare: The European Welfare Quality project provides protocols for measuring animal welfare for cattle, pigs, and poultry.
<http://www.welfarequalitynetwork.net/en-us/reports/assessment-protocols/>

World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms".
<http://www.oie.int/en/standard-setting/terrestrial-code/access-online/>

Definitions

Acidosis: Ruminal acidosis is a metabolic disease of cattle in which the ruminal pH-level decreases leading to a decrease in ruminal activity and the animal becoming atonic. The change in acidity effects the ruminal flora and causes acid-producing bacteria to become more active, making the acidosis worse. Acute acidosis often results in death, although illness and liver abscesses may be seen beforehand.

Animal health program: A farm-specific plan for how to maintain and improve animal health and welfare written and regularly updated by the farmer together with a veterinarian and other relevant technical advisors.

Bloat: An increase of ruminal gases during the ruminal fermentation process. Bloat occurs when a loss of gas is prevented.

Body condition score: Values the animal's body condition taking into account the perspective of the breed, age, and lactation stage. An emaciated or skin body condition decreases the animal's welfare.

Finishing stage: The final stage of livestock production where full-feeding and final conditioning of an animal for slaughter takes place in order to ensure satisfactory muscle and fat revenues. This excludes breeding, cow-calf, and stocker farms.

Nutritional requirement: The daily dietary need of carbohydrates, fats, fiber, minerals, proteins, vitamins, and water for animal species at all stages of life and production.

Hotspots Addressed

- 1. Supply Chain Transparency*
- 6. Health & Injuries - Farm Stage*
- 8. Health Management - Farm Stage*



9. OUTDOOR ACCESS TRANSPARENCY - BEEF CATTLE FINISHING

Question

What percentages of beef cattle at the finishing farms in your supply chain were housed in a system that does not provide cattle outdoor access or a system that provides cattle outdoor access primarily in pastures, concrete alleyways or pens, dry lots, or other forms of routine outdoor access?

Response Options

- A. We are unable to determine at this time.
- B. We are able to report the following for our supply:
 - B1. _____% of beef cattle at the finishing farms in our supply chain were housed in a system that does not provide cattle outdoor access.
 - B2. _____% of beef cattle at the finishing farms in our supply chain were housed in a system that provides cattle outdoor access primarily in pastures.
 - B3. _____% of beef cattle at the finishing farms in our supply chain were housed in a system that provides cattle outdoor access primarily in concrete alleyways or pens.
 - B4. _____% of beef cattle at the finishing farms in our supply chain were housed in a system that provides cattle outdoor access primarily in dry lots.
 - B5. _____% of beef cattle at the finishing farms in our supply chain were housed in a system that provides cattle other forms of outdoor access.

Guidance

Calculation & Scope

This question addresses transparency in production systems that are used in your supply chain. Insights in production systems are important for animal welfare assessments as they determine the preconditions for adequate welfare. From the perspective of transparency and data availability, information on housing is often easier to assemble than data on the actual outcome, measured at the animal. However, information on the production system alone cannot be used as a complete proxy for animal welfare. Amongst others, factors such as the farmers' management, training and education, climate, and genetics affect animal welfare as well. This THESIS KPI set aims to provide a set of KPIs that is balanced between management, housing, and animal-based metrics.

In B2 to B5, include finishing farms that provided the respective form of outdoor access when climatic conditions allowed.

Calculate B1 as the average percentage of beef cattle at the finishing farms in your supply chain that were housed in a system that does not provide cattle outdoor access, weighted by the mass of beef supplied by each finishing farm. For each finishing farm, calculate the number of beef cattle that are not provided outdoor access, divided by the total number of beef cattle, then multiply by 100.

Calculate B2 as the average percentage of beef cattle at the finishing farms in your supply chain that were housed in a system that provides cattle outdoor access in pastures, weighted by the mass of beef supplied by each finishing farm. For each finishing farm, calculate the number of beef cattle that are provided outdoor access primarily in pastures, divided by the total number of beef cattle, then multiply by 100.

Calculate B3 as the average percentage of beef cattle at the finishing farms in your supply chain that were housed in a system that provides cattle outdoor access in concrete alleyways or pens, weighted by the mass of beef supplied by each finishing farm. For each finishing farm, calculate the number of beef cattle that are provided outdoor access primarily in concrete alleyways or pens, divided by the total number of beef cattle, then multiply by 100.

Calculate B4 as the average percentage of beef cattle at the finishing farms in your supply chain that were housed in a system that provides cattle outdoor access in dry lots, weighted by the mass of beef supplied by each finishing farm. For each finishing farm, calculate the number of beef cattle that are provided outdoor access primarily in dry lots, divided by the total number of beef cattle, then multiply by 100.

Calculate B5 as the average percentage of beef cattle at the finishing farms in your supply chain that were housed in a system that provides cattle other forms of outdoor access, weighted by the mass of beef supplied by each finishing farm. For each finishing farm, calculate the number of beef cattle that are provided outdoor access primarily in other forms, divided by the total number of beef cattle, then multiply by 100.



The percentages reported for B1 through B5 must be mutually exclusive and their sum must not exceed 100%. Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.

Certifications, Standards & Tools

American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine.

http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements

Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death.

<https://agreenerworld.org/certifications/animal-welfare-approved/>

Beef & Lamb Quality Assurance Scheme (BLQAS): The Irish Bord Bia Beef and Lamb Quality Assurance Scheme is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product.

<https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/sustainable-beef-and-lamb-assurance-scheme-sblas/>

Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals.

<https://certifiedhumane.org/how-we-work/our-standards/>

Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture.

<https://globalanimalpartnership.org/>

GlobalG.A.P. Integrated Farm Assurance Checklist for Cattle and Sheep: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CS/

GlobalG.A.P. Integrated Farm Assurance Checklist for Dairy Cattle: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the dairy supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/DY/

Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Beef Cattle: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of beef cattle taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry.

<http://science.rspca.org.uk/sciencegroup/farmanimals/standards/beefcattle>

Background Information

Code of Practice for the Care and Handling of Beef Cattle: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of beef cattle.

http://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf

Code of Practice for the Welfare of Beef Cattle: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of beef cattle.

<http://www.fawac.ie/media/fawac/content/publications/animalwelfare/RevisedAnimalWelfareGuidelineforBeefFarmers2008.pdf>

Code of Recommendations for the Welfare of Cattle: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of cattle.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69368/pb7949-cattle-code-030407.pdf



Definitions

Finishing stage: The final stage of livestock production where full-feeding and final conditioning of an animal for slaughter takes place in order to ensure satisfactory muscle and fat revenues. This excludes breeding, cow-calf, and stocker farms.

Hotspots Addressed

- 1. Supply Chain Transparency*
 - 3. Housing - Farm Stage*
-



10. PAINFUL PROCEDURES MANAGEMENT - BEEF CATTLE

Question

What percentages of your beef supply came from cattle were not tail docked, branded, or disbudded and dehorned, and came from beef farms that have a standard operating procedure for disbudding and dehorning and castration?

Response Options

- A. We are unable to determine at this time.
- B. The following can be reported for our supply:
 - B1. _____% of our beef supply came from cattle that were not tail docked.
 - B2. _____% of our beef supply came from cattle that were not branded.
 - B3. _____% of our beef supply came from cattle that were not disbudded and dehorned.
 - B4. _____% of our beef supply came from beef farms that have a standard operating procedure for disbudding and dehorning.
 - B5. _____% of our beef supply came from beef farms that have a standard operating procedure for castration.

Guidance

Calculation & Scope

Calculate B1 as the mass of your beef supply that came from cattle that was not tail docked, divided by the total mass of your beef supply, then multiply by 100.

Calculate B2 as the mass of your beef supply that came from cattle that was not branded, divided by the total mass of your beef supply, then multiply by 100. In B2, you may include branded cattle that were raised in jurisdictions where branding is a legal requirement. Branding of cattle includes hot-iron branding and freeze branding.

Calculate B3 as the mass of your beef supply that came from cattle that were not disbudded and dehorned, divided by the total mass of your beef supply, then multiply by 100. To be included in B3, the environmental design or the use of polled breeds should allow the avoidance of disbudding and dehorning.

Calculate B4 as the mass of your beef supply that came from beef farms that have a standard operating procedure for disbudding and dehorning, divided by the total mass of your beef supply, then multiply by 100. To be included in B4, the standard operating procedure for disbudding and dehorning must meet the criteria set by the Beef Quality Assurance (BQA) program in the United States or equivalent in other geographies. These criteria include disbudding or dehorning calves as early as possible, no later than the age of 120 days, and in a humane matter. In addition to the BQA criteria on dehorning, disbudding or dehorning must be performed using pain mitigation in accordance with the recommendation of a veterinarian. Include any supply that came from cattle that were not disbudded and dehorned in response options B3 and B4.

Calculate B5 as the mass of your beef supply that came from beef farms that have a standard operating procedure for castration, divided by the total mass of your beef supply, then multiply by 100. To be included in B5, the standard operating procedure for castration must meet the criteria set by the Beef Quality Assurance (BQA) program in the United States or equivalent in other geographies. These criteria include castrating bull calves as early as possible, no later than the age of three months, and in a humane way. In addition to the BQA criteria on castration, castration must be performed using pain mitigation in accordance with the recommendation of a veterinarian. The castration method used should take into account the animal's age and weight, skill level of the operator, environmental conditions, facilities available, and human and animal safety.

Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.





Certifications, Standards & Tools

American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine.

http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements

Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death.

<https://agreenerworld.org/certifications/animal-welfare-approved/>

Beef & Lamb Quality Assurance Scheme (BLQAS): The Irish Bord Bia Beef and Lamb Quality Assurance Scheme is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product.

<https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/sustainable-beef-and-lamb-assurance-scheme-sblas/>

Beef Quality Assurance (BQA) Manual: The Beef Quality Assurance (BQA) Manual outlines science-based best management practices that provide a framework for cow-calf and stocker producers to ensure food safety and quality. The BQA program is a cooperative effort between beef producers, veterinarians, nutritionists, extension staff, and other professionals from veterinary medical associations and allied industries of farm animals.

<https://www.bqa.org/Media/BQA/Docs/nationalmanual.pdf>

Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals.

<https://certifiedhumane.org/how-we-work/our-standards/>

Dairy Animal Care and Quality Assurance (DACQA) Manual: Manual for animal care and quality assurance for dairy cows at the end of their productive lifetime.

<https://www.bqa.org/Media/BQA/Docs/dairybqamanual.pdf>

Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture.

<https://globalanimalpartnership.org/>

GlobalG.A.P. Integrated Farm Assurance Checklist for Dairy Cattle: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the dairy supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/DY/

National Dairy FARM Program Animal Care Reference Manual: The FARM Program is a nationwide, verifiable animal well-being program in the United States that provides consistency and uniformity to best practices in animal care.

<https://nationaldairyfarm.com/wp-content/uploads/2018/10/Version-3-Manual-1.pdf>

Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Beef Cattle: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of beef cattle taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry.

<http://science.rspca.org.uk/sciencegroup/farmanimals/standards/beefcattle>

Background Information

AVMA Castration and Dehorning of Cattle: The American Veterinary Medical Association (AVMA) asserts that castration and dehorning of cattle are important for human and animal safety. The AVMA recommends the use of procedures and practices that reduce or eliminate the painful effects of these procedures.

<https://www.avma.org/resources-tools/avma-policies/castration-and-dehorning-cattle>

Code of Practice for the Care and Handling of Beef Cattle: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of beef cattle.

http://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf

Code of Practice for the Welfare of Beef Cattle: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of beef cattle.



<http://www.fawac.ie/media/fawac/content/publications/animalwelfare/RevisedAnimalWelfareGuidelineforBeefFarmers2008.pdf>

Code of Recommendations for the Welfare of Cattle: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of cattle.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69368/pb7949-cattle-code-030407.pdf

Welfare Implications of Castration of Cattle: Peer-reviewed literature review on the Welfare Implications of Castration of Cattle prepared by the American Veterinary Medical Association Animal Welfare Division.

<https://www.avma.org/resources-tools/literature-reviews/welfare-implications-castration-cattle>

Welfare Implications of Hot-Iron Branding and Its Alternatives: Peer-reviewed summary about Welfare Implications of Hot-Iron Branding and Its Alternatives prepared by the American Veterinary Medical Association Animal Welfare Division.

<https://www.avma.org/resources-tools/literature-reviews/welfare-implications-hot-iron-branding-and-its-alternatives>

Welfare Implications of Tail Docking of Cattle: Peer-reviewed literature review on the Welfare Implications of Tail Docking of Cattle prepared by the American Veterinary Medical Association Animal Welfare Division.

<https://www.avma.org/resources-tools/literature-reviews/welfare-implications-tail-docking-cattle>

World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms".

<http://www.oie.int/en/standard-setting/terrestrial-code/access-online/>

Definitions

Dehorning: Removal of the horns after they have formed from the horn bud.

Disbudding: Removal of the horn-producing cells (corium) of the horn bud.

Polled breed: A breed that naturally does not have horns through selective breeding.

Standard operating procedure: Standard operating procedures (SOPs) are written instructions to document how to perform a routine activity. SOPs document the steps of key processes to help ensure the consistency and quality of the output.

Hotspots Addressed

1. *Supply Chain Transparency*
2. *Cow-Calf Management - Farm Stage*
7. *Painful Procedures - Farm Stage*



11. CULLING MANAGEMENT - BEEF CATTLE FINISHING

Question

What percentages of your beef supply came from beef finishing farms that have a standard operating procedure for culling, and that track reasons for culling?

Response Options

- A. We are unable to determine at this time.
- B. We are able to report the following for our beef supply:
 - B1. _____% of our beef supply came from finishing farms that have a standard operating procedure for culling.
 - B2. _____% of our beef supply came from finishing farms that track the reasons for culling.

Guidance

Calculation & Scope

Calculate B1 as the mass of your beef supply that came from finishing farms that have a standard operating procedure for culling, divided by the total mass of your beef supply, then multiply by 100. To be included in B1, a standard operating procedure for culling should be aligned with the culling guidelines from the Beef Quality Assurance (BQA) Program in the United States, or equivalent in other geographies, and the euthanasia guidelines from American Association of Bovine Practitioners (AAPB) in the United States, or equivalent in other geographies. The BQA guidelines include not marketing animals that have a terminal condition, pose a public health threat, are emaciated, or have advanced eye lesions. The AAPB guidelines include considerations for the selection of a method of euthanasia, mechanisms of euthanasia, determination of unconsciousness, and conformation of death. See the Certifications, Standards & Tools for more information.

Calculate B2 as the mass of your beef supply that came from finishing farms that track the reasons for culling, divided by the total mass of your beef supply, then multiply by 100. To be included in B2, the method and reasons for culling must be tracked. Examples of a reasons for culling are lameness, being a downer, mastitis, fertility problems, or a combination.

If you are unable obtain data or otherwise determine your response to a response option, enter zero percent. Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.

Certifications, Standards & Tools

American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine.
http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements

Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death.
<https://agreenerworld.org/certifications/animal-welfare-approved/>

Australian Animal Welfare Standards and Guidelines for Land Transport: The Australian Department of Agriculture, Fisheries and Forestry provides a standard for land transport of livestock.
<http://www.animalwelfarestandards.net.au/land-transport/>

Beef & Lamb Quality Assurance Scheme (BLQAS): The Irish Bord Bia Beef and Lamb Quality Assurance Scheme is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product.
<https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/sustainable-beef-and-lamb-assurance-scheme-sblas/>

Beef Quality Assurance (BQA) Manual: The Beef Quality Assurance (BQA) Manual outlines science-based best management practices that provide a framework for cow-calf and stocker producers to ensure food safety and quality. The BQA program is a cooperative effort between beef producers, veterinarians, nutritionists, extension staff, and other professionals from veterinary medical associations and allied industries of farm animals.
<https://www.bqa.org/Media/BQA/Docs/nationalmanual.pdf>





Beef Quality Assurance (BQA) The Master Cattle Transporter program: This BQA program provides guidelines on transportation of beef cattle.

https://www.bqa.org/media/bqa/docs/master_cattle_transporter_guide-digital.pdf

Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals.

<https://certifiedhumane.org/how-we-work/our-standards/>

Dairy Animal Care and Quality Assurance (DACQA) Manual: Manual for animal care and quality assurance for dairy cows at the end of their productive lifetime.

<https://www.bqa.org/Media/BQA/Docs/dairybqamannual.pdf>

Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture.

<https://globalanimalpartnership.org/>

GlobalG.A.P. Integrated Farm Assurance Checklist for Calf and Young Beef: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CYB/

GlobalG.A.P. Integrated Farm Assurance Checklist for Cattle and Sheep: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CS/

Guidelines for the Euthanasia of Animals: The American Veterinary Medical Association (AVMA) provides a policy document on euthanasia of animals.

<https://www.avma.org/sites/default/files/2020-02/Guidelines-on-Euthanasia-2020.pdf>

National Dairy FARM Top 11 Considerations for Culling and Transporting Dairy Animals: The FARM program provides the top 11 considerations for culling and transporting dairy animals to a packing or processing facility designed to assist dairy producers in making the decision on the suitability for an animal to be transported.

<https://nationaldairyfarm.com/wp-content/uploads/2018/10/dairy-cull-poster.pdf>

Practical Euthanasia of Cattle: The American Association of Bovine Practitioners provide guidelines on cattle euthanasia.

https://www.aabp.org/Resources/AABP_Guidelines/EUTHANASIA-2019.pdf

Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Beef Cattle: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of beef cattle taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry.

<http://science.rspca.org.uk/sciencegroup/farmanimals/standards/beefcattle>

Background Information

Code of Practice for the Care and Handling of Beef Cattle: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of beef cattle.

http://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf

Code of Practice for the Welfare of Beef Cattle: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of beef cattle.

<http://www.fawac.ie/media/fawac/content/publications/animalwelfare/RevisedAnimalWelfareGuidelineforBeefFarmers2008.pdf>

Code of Recommendations for the Welfare of Cattle: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of cattle.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69368/pb7949-cattle-code-030407.pdf

Paper on Culling the Beef Cow Herd: A peer-reviewed paper titled: Culling the Beef Cow Herd.

<https://www.uaex.edu/publications/pdf/FSA-3092.pdf>



World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms".

<http://www.oie.int/en/standard-setting/terrestrial-code/access-online/>

Definitions

Downer: A downer is a non-ambulatory animal that cannot stand on its own. The most likely reason for cattle to go down is a trauma, for example: metabolic, traumatic, infectious, degenerative, and toxic disorders.

Finishing stage: The final stage of livestock production where full-feeding and final conditioning of an animal for slaughter takes place in order to ensure satisfactory muscle and fat revenues. This excludes breeding, cow-calf, and stocker farms.

Standard operating procedure: Standard operating procedures (SOPs) are written instructions to document how to perform a routine activity. SOPs document the steps of key processes to help ensure the consistency and quality of the output.

Hotspots Addressed

- 1. Supply Chain Transparency*
 - 5. Culling Procedures - Farm Stage*
 - 8. Health Management - Farm Stage*
-



12. MORTALITY RATE – BEEF CATTLE FINISHING

Question

What was the average mortality rate at the finishing farms in your supply chain?

Response Options

- A. We are unable to determine at this time.
- B. We are able to report the following for our supply:
 - B1. _____ mortality rate.
 - B2. _____% of our beef supply is represented by the number reported in B1.

Guidance

Calculation & Scope

Mortality rate is an indirect measure of animal welfare. It adds value to the interpretation of other key performance indicators concerning culling management, animal welfare certification and audits, housing systems, and animal health management.

Calculate B1 as the average mortality rate of beef cattle at the finishing farms in your supply chain, weighted by the mass of beef supplied by each finishing farm. For each finishing farm, calculate the mortality rate as the number of deceased cattle, divided by the annual total number of beef cattle present, then multiply by 100. Mortality is defined as the uncontrolled death of finishing cattle as well as cases of euthanasia and emergency slaughter at the finishing farm. Culling (i.e., selling cattle to a slaughterhouse, auction place, or another farm, and stillborn cattle) is not considered in this metric.

If primary farm data are unavailable for any of your supply, you may use a regional estimate to answer B1. Do not combine primary data and regional estimates. To answer B1 using regional estimates, you should only use estimates from a sub-country area such as an agricultural zone or region, eco-region, or geo-political boundary (e.g., state, county, department) where the beef finishing farms are located. A regional estimate must be based on a study that is representative of the production system, based on production data not older than 3 years and published in a publicly available document.

Calculate B2 as the mass of beef supply for which you were able to obtain data, divided by the total mass of your beef supply, then multiply by 100. If you have reported regional estimates for B1, then report 0% for B2.

Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.

Certifications, Standards & Tools

American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine.
http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements

Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death.
<https://agreenerworld.org/certifications/animal-welfare-approved/>

Beef & Lamb Quality Assurance Scheme (BLQAS): The Irish Bord Bia Beef and Lamb Quality Assurance Scheme is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product.
<https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/sustainable-beef-and-lamb-assurance-scheme-sblas/>

GlobalG.A.P. Integrated Farm Assurance Checklist for Calf and Young Beef: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.
https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CYB/



GlobalG.A.P. Integrated Farm Assurance Checklist for Cattle and Sheep: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CS/

Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Beef Cattle: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of beef cattle taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry.

<http://science.rspca.org.uk/sciencegroup/farmanimals/standards/beefcattle>

Welfare Quality, Science and Society Improving Animal Welfare: The European Welfare Quality project provides protocols for measuring animal welfare for cattle, pigs, and poultry.

<http://www.welfarequalitynetwork.net/en-us/reports/assessment-protocols/>

Background Information

Bovine Medicine: Book on cattle practice, management and professional skills, clinical skills, and herd health.

<https://www.wiley.com/en-us/Bovine+Medicine%2C+3rd+Edition-p-9781444336436>

Paper on assessing finishing beef cattle mortality: A peer-reviewed paper titled: Assessment of finishing beef cattle mortality in a sustainable farming perspective.

<https://www.sciencedirect.com/science/article/abs/pii/S1871141315003017>

Paper on beef cattle welfare in the USA: A peer-reviewed paper titled: Beef cattle welfare in the USA: identification of priorities for future research.

<http://dx.doi.org/10.1017/S1466252315000171>

Definitions

Finishing stage: The final stage of livestock production where full-feeding and final conditioning of an animal for slaughter takes place in order to ensure satisfactory muscle and fat revenues. This excludes breeding, cow-calf, and stocker farms.

Mortality: The uncontrolled death of animals and cases of euthanasia and emergency slaughter at the farm.

Hotspots Addressed

1. Supply Chain Transparency
5. Culling Procedures - Farm Stage
8. Health Management - Farm Stage



13. TRANSPORTATION TO SLAUGHTER - BEEF CATTLE

Question

What percentage of your beef suppliers publicly disclose a transportation plan that covers animal welfare and what was the average dead-on-arrival rate for beef cattle at slaughter facilities in your supply chain?

Response Options

- A.** We are unable to determine at this time or our beef supply is not covered by a transportation plan that covers animal welfare.
- B.** We are able to report the following for our supply:
 - B1.** _____% of our beef suppliers publicly disclose a transportation plan that specifies how animal welfare is covered during transportation to slaughter.
 - B2.** _____% of our beef supply is represented by the number reported in B1.
 - B3.** _____ dead-on-arrival rate per delivery.
 - B4.** _____% of our beef supply is represented by the number reported in B3.

Guidance

Calculation & Scope

Calculate B1 as the number of your suppliers that publicly disclose a transportation plan that specifies how animal welfare is covered during transportation to slaughter, divided by the total number of your suppliers, then multiply by 100. To be included in B1, the transportation plan must meet the guidelines provided by the Beef Quality Assurance Master Cattle Program in the United States, or equivalent in other geographies. These guidelines include handling, training, transport conditions, record keeping, and equipment. See the Certifications, Standards & Tools for more information.

Calculate B3 as the average dead-on-arrival rate per delivery at the slaughter facility, weighted by the mass beef supplied by each delivery at the slaughter facility. For each delivery, calculate the dead-on-arrival rate as the number of deceased cattle during transport, divided by the number of cattle that were transported, then multiply by 100.

If primary data are unavailable for any of your supply, you may use a regional estimate to answer B1 and B3. Do not combine primary data and regional estimates. To answer B1 and B3 using regional estimates, you should only use estimates from a sub-country area such as an agricultural zone or region, eco-region, or geo-political boundary (e.g., state, county, department) where the finishing farms are located. A regional estimate must be based on a study that is representative of the production system, based on production data not older than 3 years and published in a publicly available document.

Calculate B2 and B4 as the mass of beef supply for which you were able to obtain data, divided by the total mass of your beef supply, then multiply by 100. If you have reported regional estimate for B1 or B3, then report 0% for B2 or B4 respectively.

Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.

Certifications, Standards & Tools

American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine.
http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements

Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death.
<https://agreenworld.org/certifications/animal-welfare-approved/>

Australian Animal Welfare Standards and Guidelines for Land Transport: The Australian Department of Agriculture, Fisheries and Forestry provides a standard for land transport of livestock.
<http://www.animalwelfarestandards.net.au/land-transport/>





Beef Quality Assurance (BQA) Manual: The Beef Quality Assurance (BQA) Manual outlines science-based best management practices that provide a framework for cow-calf and stocker producers to ensure food safety and quality. The BQA program is a cooperative effort between beef producers, veterinarians, nutritionists, extension staff, and other professionals from veterinary medical associations and allied industries of farm animals.

<https://www.bqa.org/Media/BQA/Docs/nationalmanual.pdf>

Beef Quality Assurance (BQA) The Master Cattle Transporter program: This BQA program provides guidelines on transportation of beef cattle.

https://www.bqa.org/media/bqa/docs/master_cattle_transporter_guide-digital.pdf

Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals.

<https://certifiedhumane.org/how-we-work/our-standards/>

Dairy Animal Care and Quality Assurance (DACQA) Manual: Manual for animal care and quality assurance for dairy cows at the end of their productive lifetime.

<https://www.bqa.org/Media/BQA/Docs/dairybqamannual.pdf>

EU Regulation on Animal Welfare during transport: Council Regulation (EC) No 1/2005 on the protection of animals during transport and related operations.

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:f83007>

Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture.

<https://globalanimalpartnership.org/>

GlobalG.A.P. Integrated Farm Assurance Checklist for Calf and Young Beef: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CYB/

GlobalG.A.P. Integrated Farm Assurance Checklist for Cattle and Sheep: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in the beef supply chain including the issue of animal welfare.

https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/CS/

Background Information

Code of Practice for the Care and Handling of Beef Cattle: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of beef cattle.

https://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf

Code of Practice for the Transport of Animals: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of farm animals during transport.

https://www.nfacc.ca/pdfs/codes/pig_code_of_practice.pdf

Code of Practice for the Welfare of Beef Cattle: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of beef cattle.

<http://www.fawac.ie/media/fawac/content/publications/animalwelfare/RevisedAnimalWelfareGuidelineforBeefFarmers2008.pdf>

Code of Recommendations for the Welfare of Cattle: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of cattle.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69368/pb7949-cattle-code-030407.pdf

Online Guide on Transport of Livestock: The Humane Slaughter Organization in the United Kingdom provides information on issues, considerations, and best practices in transport and slaughter of livestock.

<http://www.hsa.org.uk/transport-of-livestock-introduction/introduction-8>

Paper on Culling the Beef Cow Herd: A peer-reviewed paper titled: Culling the Beef Cow Herd.

<https://www.uaex.edu/publications/pdf/FSA-3092.pdf>



Definitions

Dead-on-arrival: Dead-on-arrival (DOA) or brought-in-dead (BID), is a term that indicates an animal is clinically dead upon the moment of arrival.

Hotspots Addressed

- 1. Supply Chain Transparency*
 - 10. Animal Handling - Transportation Stage*
-



14. ASSESSMENT AT SLAUGHTER - BEEF CATTLE

Question

What percent of cattle were non-ambulatory at slaughterhouse arrival and what percentage of your beef supply was dark, firm, and dry meat?

Response Options

- A. We are unable to determine at this time.
- B. We are able to report the following for our beef supply:
 - B1. _____% of cattle were non-ambulatory at slaughterhouse arrival.
 - B2. _____% of our beef supply is represented by the number reported in B1.
 - B3. _____% of beef was dark, firm, and dry meat at slaughterhouse facilities.
 - B4. _____% of our beef supply is represented by the number reported in B3.

Guidance

Calculation & Scope

Calculate B1 as the average non-ambulatory cattle rate per delivery, weighted by the mass of beef supplied by each delivery. For each delivery, calculate the non-ambulatory cattle rate as the number of non-ambulatory cattle that arrived at the slaughter facility, divided by the number of cattle that were transported, then multiply by 100. Non-ambulatory cattle are cattle that are not able to stand up and walk. Reasons for cattle becoming non-ambulatory include, but is not limited to: fractures, neurological diseases, metabolic diseases, and mastitis.

Calculate B3 as the average percentage of dark, firm, and dry meat per delivery at the slaughter facility, weighted by the mass of beef supplied by each delivery. For each delivery at the slaughter facility, calculate the percentage of dark, firm, and dry meat as the mass of dark, firm, and dry meat, divided by the total mass of meat, then multiply by 100.

If primary data are unavailable for any of your supply, you may use a regional estimate to answer B1. Do not combine primary data and regional estimates. To answer B1 using regional estimates, you should only use estimates from a sub-country area such as an agricultural zone or region, eco-region, or geo-political boundary (e.g., state, county, department) where the finishing farms are located. A regional estimate must be based on a study that is representative of the production system, based on production data not older than 3 years and published in a publicly available document.

Calculate B2 and B4 as the mass of beef supply for which you were able to obtain data, divided by the total mass of beef supply, then multiply by 100. If you have reported regional estimate for B1 or B3, then report 0% for B2 or B4 respectively.

Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.

Certifications, Standards & Tools

Australian Animal Welfare Standards and Guidelines for Land Transport: The Australian Department of Agriculture, Fisheries and Forestry provides a standard for land transport of livestock.
<http://www.animalwelfarestandards.net.au/land-transport/>

Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals.
<https://certifiedhumane.org/how-we-work/our-standards/>



Background Information

Beef Quality Assurance (BQA) Manual: The Beef Quality Assurance (BQA) Manual outlines science-based best management practices that provide a framework for cow-calf and stocker producers to ensure food safety and quality. The BQA program is a cooperative effort between beef producers, veterinarians, nutritionists, extension staff, and other professionals from veterinary medical associations and allied industries of farm animals.

<https://www.bqa.org/Media/BQA/Docs/nationalmanual.pdf>

Beef Quality Assurance (BQA) The Master Cattle Transporter program: This BQA program provides guidelines on transportation of beef cattle.

https://www.bqa.org/media/bqa/docs/master_cattle_transporter_guide-digital.pdf

Code of Practice for the Care and Handling of Beef Cattle: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of beef cattle.

http://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf

Code of Practice for the Transport of Animals: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of farm animals during transport.

https://www.nfacc.ca/pdfs/codes/pig_code_of_practice.pdf

Code of Practice for the Welfare of Beef Cattle: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of beef cattle.

<http://www.fawac.ie/media/fawac/content/publications/animalwelfare/RevisedAnimalWelfareGuidelineforBeefFarmers2008.pdf>

Code of Recommendations for the Welfare of Cattle: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of cattle.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69368/pb7949-cattle-code-030407.pdf

Dairy Animal Care and Quality Assurance (DACQA) Manual: Manual for animal care and quality assurance for dairy cows at the end of their productive lifetime.

<https://www.bqa.org/Media/BQA/Docs/dairybqamanual.pdf>

EU Regulation on Animal Welfare during transport: Council Regulation (EC) No 1/2005 on the protection of animals during transport and related operations.

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:f83007>

Factsheet on Dark Cutters: The National Cattlemen's Beef Association provides a factsheet on dark, firm and dry beef.

<https://fyi.extension.wisc.edu/wbic/files/2011/04/Dark-Firm-and-Dry-Beef.pdf>

Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture.

<https://globalanimalpartnership.org/>

Online Guide on Transport of Livestock: The Humane Slaughter Organization in the United Kingdom provides information on issues, considerations, and best practices in transport and slaughter of livestock.

<http://www.hsa.org.uk/transport-of-livestock-introduction/introduction-8>

Paper on Culling the Beef Cow Herd: A peer-reviewed paper titled: Culling the Beef Cow Herd.

<https://www.uaex.edu/publications/pdf/FSA-3092.pdf>

Definitions

Dark, firm, and dry meat: Dark, firm, and dry meat is often referred to as dark cutting beef. This condition is a result of an animal's depleted muscle glycogen reserves prior to slaughter, which can be attributed to pre-slaughter stress like transport exhaustion, fear, or hunger.

Non-ambulatory cattle: An animal that cannot stand on its own. Cattle may become non-ambulatory due to trauma such as metabolic, traumatic, infectious, degenerative, and toxic disorders.

Hotspots Addressed

1. Supply Chain Transparency

9. Animal Handling - Slaughter Stage

10. Animal Handling - Transportation Stage





15. PRE-SLAUGHTER STUNNING TRANSPARENCY - BEEF CATTLE

Question

What percentages of your beef supply came from cattle that were effectively stunned before slaughter using captive bolt, electrical, or other methods of stunning?

Response Options

- A. Not applicable. The cattle in our supply chain are ritually slaughtered.
- B. We are unable to determine at this time.
- C. We are able to report the following for our beef supply:
 - C1. _____% of our beef supply came from cattle that were effectively stunned with a captive bolt.
 - C2. _____% of our beef supply came from cattle that were effectively electrically stunned.
 - C3. _____% of our beef supply came from cattle that were effectively stunned prior to slaughter using other methods.

Guidance

Calculation & Scope

Calculate C1 as the mass of your beef supply that came from cattle that were effectively stunned with a captive bolt, divided by the total mass of your beef supply, then multiply by 100.

Calculate C2 as the mass of your beef supply that came from cattle that were effectively electrically stunned, divided by the total mass of your beef supply, then multiply by 100.

Calculate C3 as the mass of your beef supply that came from cattle that were effectively stunned by methods other than included in C1 and C2, divided by the total mass of your beef supply, then multiply by 100.

The percentages reported for C1 through C3 are mutually exclusive and their sum must not exceed 100%. Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.

Background Information

Captive-Bolt Stunning of Livestock: The Humane Slaughter Association in the United Kingdom provides guidance on captive-bolt stunning of livestock.

<http://www.hsa.org.uk/downloads/publications/captive-bolt-stunning-of-livestock-updated-logo-2016.pdf>

Code of Practice for the Care and Handling of Beef Cattle: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of beef cattle.

http://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf

Code of Practice for the Welfare of Beef Cattle: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of beef cattle.

<http://www.fawac.ie/media/fawac/content/publications/animalwelfare/RevisedAnimalWelfareGuidelineforBeefFarmers2008.pdf>

Code of Recommendations for the Welfare of Cattle: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of cattle.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69368/pb7949-cattle-code-030407.pdf

Electrical Stunning of Red Meat Animals: An article explaining the theory, practice, and use of electricity to stun and kill animals. It provides essential technical information to abattoir supervisors, veterinary surgeons, meat hygiene inspectors, and maintenance engineers. It can assist management in the selection of equipment and provide operators with background information to help them carry out their job competently and safely.

<http://www.hsa.org.uk/downloads/publications/electricalstunningdownload-updated-2016-logo.pdf>

FAO: Guidelines for Humane Handling, Transport and Slaughter of Livestock: Document describing basic principles for humane handling, transport, and slaughter of livestock.

<http://www.fao.org/docrep/003/x6909e/x6909e00.htm#Contents>

Recommended Animal Handling Guidelines & Audit Guide: The American Meat Institute provides a guide on recommended practices including transportation audit guidelines and stunning guidelines.



http://animalhandling.org/producers/guidelines_audits

Definitions

Stunning: Stunning is the process of rendering the animal unconscious prior to slaughter.

Hotspots Addressed

- 1. Supply Chain Transparency*
 - 9. Animal Handling - Slaughter Stage*
-



Category Sustainability Profile

Hotspots

Hotspots are activities in a product's life cycle that have a documented environmental or social impact. TSC evaluates the quality and quantity of the scientific sources of evidence for each hotspot according to a defined decision tree before they are included in the CSP. Items marked with an asterisk (*) are *additional issues* that have not achieved the same level of evidence as a hotspot. For more information on the methodology TSC uses to identify hotspots visit: <http://www.sustainabilityconsortium.org/toolkit-methodology>



AGRICULTURE AND LIVESTOCK

1. Supply Chain Transparency

A lack of supply chain transparency can inhibit the setting of actionable goals on the issue of animal welfare. A higher level of supply chain transparency enhances measurability and accountability of animal welfare hotspots and enables stakeholders such as non-governmental organizations, consumers, manufacturers, and governments to improve the understanding, monitoring, and evaluation of animal welfare.

Related Improvement Opportunities

- 14. *Implement a data sharing system across the supply chain*
- 15. *Implement an animal welfare policy*
- 16. *Implement animal welfare best practices at beef cattle farms, during transport, and at slaughter*

KPIs

- 1. *Animal Welfare Policy*
- 2. *Animal Welfare Certifications and Audits - Beef Cattle Farming Stages*
- 3. *Animal Welfare Certifications and Audits - Beef Cattle Transport and Slaughter*
- 5. *Animal Health Management – Beef Finishing Farms*
- 6. *Housing System Specifications - Beef Cattle Finishing*
- 7. *Lameness - Beef Cattle Finishing*
- 8. *Nutrition Management - Beef Cattle Finishing*
- 9. *Outdoor Access Transparency - Beef Cattle Finishing*
- 10. *Painful Procedures Management - Beef Cattle*
- 11. *Culling Management - Beef Cattle Finishing*
- 12. *Mortality Rate – Beef Cattle Finishing*
- 13. *Transportation to Slaughter - Beef Cattle*
- 14. *Assessment at Slaughter - Beef Cattle*
- 15. *Pre-Slaughter Stunning Transparency - Beef Cattle*

References

- Arfini & Mancini, 2010
- Blokhuis, Jones, Geers, Miele, & Veissier, 2003
- Petherick, 2005

2. Cow-Calf Management - Farm Stage

Inadequate cow-calf management leads to animal health and welfare problems. An unclean and wet calving area enhances bacteria growth and fosters disease transmission. Animal caretakers that have an insufficient skill level on nutritional requirements and calf housing and handling create a risk for potential injury, distress, and disease.

Related Improvement Opportunities

- 1. *Designate people at site that evaluate and assess beef cattle health and welfare*
- 8. *Provide transparency in beef cattle housing practices*
- 16. *Implement animal welfare best practices at beef cattle farms, during transport, and at slaughter*

KPIs

- 2. *Animal Welfare Certifications and Audits - Beef Cattle Farming Stages*
- 10. *Painful Procedures Management - Beef Cattle*

References

- Færevik, Jensen, & Bøe, 2010
- Fraser et al., 2013
- Scott, 2013
- Vasseur et al., 2010





3. Housing - Farm Stage

The physical environment affects the health and vigor of animals. A lack of readily accessible feed and water, a safe shelter, comfort around resting, adequate air quality, temperature, and humidity, sufficient space allowance, and environmental enrichment that fulfill an animal's basic needs lead to a decrease in animal health and welfare.

Related Improvement Opportunities

- 8. *Provide transparency in beef cattle housing practices*
- 10. *Set minimum requirements for housing practices at finishing farms*
- 14. *Implement a data sharing system across the supply chain*

KPIs

- 6. *Housing System Specifications - Beef Cattle Finishing*
- 9. *Outdoor Access Transparency - Beef Cattle Finishing*

References

- Brscic et al., 2015
- Espejo, Endres, & Salfer, 2006
- Fraser, 2014
- Fraser et al., 2013
- Moons, Sonck & Tuytens, 2014
- Petherick & Phillips, 2009
- Scott, 2013
- Uetake, 2013
- Ventura et al., 2016

4. Animal Handling - Farm Stage

A lack of skills and knowledge about the physical and environmental requirements that fulfill an animal's basic needs, stress factors, and recognizing common diseases, illnesses, and injuries and insufficient training to evaluate and assess animal welfare by animal caretakers may lead to improper handling of animals and result in animal injuries, panic, lasting fear, or stress.

Related Improvement Opportunities

- 1. *Designate people at site that evaluate and assess beef cattle health and welfare*
- 7. *Implement stockperson training programs for cattle health and welfare at beef finishing farms*
- 14. *Implement a data sharing system across the supply chain*

KPIs

- 4. *Stockperson Training - Beef Cattle*
- 5. *Animal Health Management – Beef Finishing Farms*

References

- Fraser et al., 2013
- Grandin, 2003
- Hemsworth et al., 2011
- Petherick, 2005

5. Culling Procedures - Farm Stage

Improper culling management such as painful methods of euthanasia and lack of determination of unconsciousness and conformation of death affects animal welfare. Culling management also includes considerations prior to transport. Transport of non-marketable animals that have a terminal condition posing a threat to public health, are emaciated, or are not able to walk causes the animal pain and stress.

Related Improvement Opportunities

- 9. *Set minimum requirements for culling management at the beef finishing farm*
- 14. *Implement a data sharing system across the supply chain*

KPIs

- 11. *Culling Management - Beef Cattle Finishing*
- 12. *Mortality Rate – Beef Cattle Finishing*

References

- Dechow, Smith, & Goodling, 2011
- Donnelly et al., 2006
- Fraser et al., 2013
- Matulis, McKeith, Faulkner, Berger & George, 1987
- Uetake, 2013



6. Health & Injuries - Farm Stage

Improper nutritional management, poor housing conditions, and improper handling lead to metabolic, respiratory, or reproductive diseases and injuries such as lameness and mastitis.

Related Improvement Opportunities

5. Implement best practices that pursue adequate nutritional management for beef cattle

6. Implement best practices to prevent lameness in beef cattle

14. Implement a data sharing system across the supply chain

KPIs

6. Housing System Specifications - Beef Cattle Finishing

7. Lameness - Beef Cattle Finishing

8. Nutrition Management - Beef Cattle Finishing

References

- Elmore et al., 2015
- Espejo, Endres, & Salfer, 2006
- Fraser et al., 2013
- Petherick & Phillips, 2009
- Roeber et al., 2001
- Uetake, 2013

7. Painful Procedures - Farm Stage

Painful procedures such as dehorning and disbudding, branding, and castration can lead to stress, pain, and discomfort.

Related Improvement Opportunities

4. Implement a policy on painful procedures management in beef supply chains

11. Set time-bound goals to abolish painful procedures in beef supply chains

14. Implement a data sharing system across the supply chain

KPIs

10. Painful Procedures Management - Beef Cattle

References

- Coetzee, 2013
- Fraser et al., 2013
- Petherick, 2005
- Schwartzkopf-Genswein, Stookey, Crowe, & Genswein, 1998
- Weary, Niel, Flower, & Fraser, 2006

8. Health Management - Farm Stage

Lack of oversight by a professional may result in no or slow identification of health problems, diseases, and injuries and affect animal health and welfare. Absence of animal health monitoring and evaluation tools decreases the ability of the animal care taker to act in a timely manner.

Related Improvement Opportunities

2. Establish a veterinarian-client-patient relationship (VCPR) at beef cattle farms

3. Implement an animal health performance monitoring system at beef finishing farms

7. Implement stockperson training programs for cattle health and welfare at beef finishing farms

KPIs

5. Animal Health Management – Beef Finishing Farms

7. Lameness - Beef Cattle Finishing

8. Nutrition Management - Beef Cattle Finishing

11. Culling Management - Beef Cattle Finishing

12. Mortality Rate – Beef Cattle Finishing

References

- Fraser, 2014
- Fraser et al., 2013
- Roeber et al., 2001
- Scott, 2013



MANUFACTURING AND ASSEMBLY

9. Animal Handling - Slaughter Stage

A lack of skills and knowledge about effective stunning techniques and pre-slaughter handling and insufficient training to evaluate and assess animal welfare by animal caretakers may lead to improper handling of animals and result in animal injuries, panic, lasting fear, or stress. Ineffective stunning and inadequate handling of animals prior to slaughter also affects animal welfare.

Related Improvement Opportunities

1. Designate people at site that evaluate and assess beef cattle health and welfare
12. Implement stockperson training programs for cattle health and welfare at the slaughter stage
14. Implement a data sharing system across the supply chain

KPIs

4. Stockperson Training - Beef Cattle
14. Assessment at Slaughter - Beef Cattle
15. Pre-Slaughter Stunning Transparency - Beef Cattle

References

- Compassion in World Farming, 2009
- Fraser et al., 2013
- Grandin, 2003
- Grandin, 2006
- Gregory, 2008
- Hemsworth et al., 2011
- Velarde & Dalmau, 2012



DISTRIBUTION

10. Animal Handling - Transportation Stage

A lack of skills and knowledge about loading and unloading procedures and insufficient training to evaluate and assess animal welfare by animal caretakers may lead to improper handling of animals and result in animal injuries, panic, lasting fear, or stress. A lack of access feed and clean water, transport of animals that are not fit for travel, and long-lasting close confinement during transport also impact animal welfare.

Related Improvement Opportunities

1. Designate people at site that evaluate and assess beef cattle health and welfare
13. Implement stockperson training programs for cattle health and welfare at the transportation stage
14. Implement a data sharing system across the supply chain

KPIs

4. Stockperson Training - Beef Cattle
13. Transportation to Slaughter - Beef Cattle
14. Assessment at Slaughter - Beef Cattle

References


- Fraser et al., 2013
- González, Schwartzkopf-Genswein, Bryan, Silasi, & Brown, 2012b
- González, Schwartzkopf-Genswein, Bryan, Silasi, & Brown, 2012a
- Gregory, 2008
- Schwartzkopf-Genswein et al., 2012
- Speer, Slack & Troyer, 2001





Improvement Opportunities

Improvement opportunities are practices that address one or more environmental or social hotspots and are actionable by brand manufacturers or their suppliers. TSC evaluates the quality of the evidence supporting each improvement opportunity according to a defined decision tree before including it in the CSP. For more information on the methodology TSC uses to identify hotspots visit: <http://www.sustainabilityconsortium.org/toolkit-methodology>

 AGRICULTURE AND LIVESTOCK	
<p>1. Designate people at site that evaluate and assess beef cattle health and welfare</p> <p>Seek collaboration with supply chain partners to ensure that designated people evaluate and assess animal welfare at all life stages. A designated person should have the skills to evaluate animal health and welfare and be verifiably trained and experienced in managing beef cattle health and welfare. Evaluation of animal health and welfare includes herd activity and behavior, prevalence of diseases, injury detection, and availability of water and feed.</p> <p>Related Hotspots</p> <ul style="list-style-type: none"> 2. Cow-Calf Management - Farm Stage 4. Animal Handling - Farm Stage 9. Animal Handling - Slaughter Stage 10. Animal Handling - Transportation Stage 	<p>References</p> <ul style="list-style-type: none"> American Humane Certified Animal Welfare Standards American Veterinary Medical Association, 2016 Beef Quality Assurance (BQA) Beef Quality Assurance, 2016 European Platform for the Responsible Use of Medicines in Animals Federation of Veterinarians of Europe GOV.UK, 2012 The Cattle Site The Welfare Quality Network World Organisation for Animal Health, 2016a
<p>2. Establish a veterinarian-client-patient relationship (VCPR) at beef cattle farms</p> <p>Establish a VCPR that sets goals to commit to farm animal health and welfare issues. A VCPR is an essential basis for interaction between veterinarians and their clients and is critical to providing quality animal health care. A VCPR should meet the criteria of the American Veterinary Medical Association or the European Platform for the Responsible Use of Medicines in Animals.</p> <p>Related Hotspots</p> <ul style="list-style-type: none"> 8. Health Management - Farm Stage 	<p>References</p> <ul style="list-style-type: none"> Scott, 2013
<p>3. Implement an animal health performance monitoring system at beef finishing farms</p> <p>Implement an animal health performance monitoring system that sets targets for supply chain partners to commit to farm animal welfare issues. Animal health management systems should include monitoring the prevalence of disease and incidence of injuries and evaluation of the data for information to integrate into management and communication with animal care teams (including veterinarians). An animal health performance management system includes production performance, injuries, and diseases. Examples of production performance metrics are mortality and culling rates and feed intake. Examples of injuries are lameness and skin lesions. Examples of diseases are metabolic, respiratory, and reproductive diseases.</p> <p>Related Hotspots</p> <ul style="list-style-type: none"> 8. Health Management - Farm Stage 	<p>References</p> <ul style="list-style-type: none"> Scott et al., 2009



<p>4. Implement a policy on painful procedures management in beef supply chains Implement a policy that sets goals for supply chain partners to set clear requirements for painful procedures management in the beef supply chain. These requirements depend on the type of procedure and may include the age and weight of the animal, pain mitigation in accordance with the recommendation of a veterinarian, the skill level of the operator, environmental conditions, (e.g., the housing system and available facilities), and human and animal safety.</p> <p>Related Hotspots <i>7. Painful Procedures - Farm Stage</i></p>	<p>References</p> <ul style="list-style-type: none"> ▪ Weary, Niel, Flower, & Fraser, 2006
<p>5. Implement best practices that pursue adequate nutritional management for beef cattle Use best practices in nutritional management. Beef cattle require access to feed and clean water according to their specific requirements for maintenance, growth, health, and gestation (if applicable). Farmers can consult a nutritionist for advice on ration formulation and feeding programs. Observation and monitoring the nutritional condition can be a starting point for nutritional management and can include implementing a body condition scoring system and monitoring incidence of ruminal acidosis or bloat.</p> <p>Related Hotspots <i>6. Health & Injuries - Farm Stage</i></p>	<p>References</p> <ul style="list-style-type: none"> ▪ Hepworth, Neary & Kenyon, 2004
<p>6. Implement best practices to prevent lameness in beef cattle Use best practices to prevent lameness and mobility problems in beef cattle. Best practices include implementing locomotion scoring, a lameness protocol, preventative hoof trimming, routine antibacterial foot baths, and improved floor design.</p> <p>Related Hotspots <i>6. Health & Injuries - Farm Stage</i></p>	<p>References</p> <ul style="list-style-type: none"> ▪ Hepworth, Neary & Kenyon, 2004 ▪ The University of British Columbia, 2009
<p>7. Implement stockperson training programs for cattle health and welfare at beef finishing farms Seek collaboration with supply chain partners to implement stockperson training for animal health and welfare at beef finishing farms. Document that those who are in contact with cattle are competent and trained in proper handling procedures. The training should include facility requirements, humane cattle handling, animal behavior, and injury and disease detection. Stockpersons should have an understanding of the physical and environmental requirements for cattle and stress factors such as other cattle, personnel, strange noises, sights, sounds, and smells and be able to recognize common diseases, illnesses, and injuries and normal cattle activity and behavior. Additional training may be required for monitoring individual cow health, proper equipment use, and newborn calf management or for outside workers such as transporters and foot trimmers.</p> <p>Related Hotspots <i>4. Animal Handling - Farm Stage</i> <i>8. Health Management - Farm Stage</i></p>	<p>References</p> <ul style="list-style-type: none"> ▪ Boivin & Ruis, 2011 ▪ Coleman & Hemsworth, 2014 ▪ Grandin, 2003 ▪ Hemsworth, 2007
<p>8. Provide transparency in beef cattle housing practices Insight into housing systems is important for animal welfare assessments as it determines the preconditions of adequate animal welfare. Information on the housing system should be evaluated in conjunction with other factors such as the farmers' management, training, and education, climate, or genetics for effects on animal welfare.</p> <p>Related Hotspots <i>2. Cow-Calf Management - Farm Stage</i> <i>3. Housing - Farm Stage</i></p>	<p>References</p> <ul style="list-style-type: none"> ▪ Blokhuis, Jones, Geers, Miele, & Veissier, 2003



<p>9. Set minimum requirements for culling management at the beef finishing farm Seek collaboration with supply chain partners to set minimum requirements for culling management at the finishing farm. These requirements include considerations for avoidance of transporting non-marketable animals that have a terminal condition, pose a public health threat, are emaciated, or are not able to walk and considerations for selection the method and mechanism of euthanasia, determination of unconsciousness, and conformation of death.</p> <p>Related Hotspots <i>5. Culling Procedures - Farm Stage</i></p>	<p>References</p> <ul style="list-style-type: none"> Fetrow, Nordlund, & Norman, 2006
<p>10. Set minimum requirements for housing practices at finishing farms Seek collaboration with supply chain partners to set minimum requirements for housing practices at finishing farms. The minimum requirements should include allowing cattle to easily stand up, lie down, and adopt normal resting postures with visual eye contact with other cattle, giving cattle access to a lying area that provides comfort, insulation, warmth, dryness, and traction, and providing cattle protection from heat and cold. Tools to provide protection include providing shade, fans, sprinklers, and windbreakers.</p> <p>Related Hotspots <i>3. Housing - Farm Stage</i></p>	<p>References</p> <ul style="list-style-type: none"> Hepworth, Neary & Kenyon, 2004
<p>11. Set time-bound goals to abolish painful procedures in beef supply chains Set a time-bound goal with supply chain partners to phase out painful procedures such as tail docking and branding in the beef supply chain. The goal must be in accordance with applicable legislation.</p> <p>Related Hotspots <i>7. Painful Procedures - Farm Stage</i></p>	<p>References</p> <ul style="list-style-type: none"> Weary, Niel, Flower, & Fraser, 2006



MANUFACTURING AND ASSEMBLY

<p>12. Implement stockperson training programs for cattle health and welfare at the slaughter stage Seek collaboration with supply chain partners to implement stockperson training for animal health and welfare for beef cattle slaughter. Document that those who are in contact with cattle are competent and trained in proper handling procedures. The training must include understanding of the physical and environmental requirements of the animal, humane cattle handling, animal behavior, pre-slaughter stress factors, and effective stunning techniques.</p> <p>Related Hotspots <i>9. Animal Handling - Slaughter Stage</i></p>	<p>References</p> <ul style="list-style-type: none"> Grandin, 2003 Grandin, 2006 Hemsworth et al., 2011
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DISTRIBUTION

13. Implement stockperson training programs for cattle health and welfare at the transportation stage

Seek collaboration with supply chain partners to implement stockperson training for animal health and welfare for beef cattle transporters. Document that those who are in contact with cattle are competent and trained in proper handling procedures. The training should include facility requirements, humane cattle handling, animal behavior, and injury and disease detection. Stockpersons should recognize animals that are not fit to travel, and have knowledge about loading and unloading procedures that minimize beef cattle stress, prevent injury, and use facilities that promote calm and safe beef cattle movement.

Related Hotspots

10. Animal Handling - Transportation Stage

References

- Boivin & Ruis, 2011
- Schwartzkopf-Genswein, Haley, Church, Woods, & O'Byrne, 2008



IMPROVEMENT OPPORTUNITIES FOR MULTIPLE LIFE CYCLE STAGES

14. Implement a data sharing system across the supply chain

Use a system for data assembly and sharing that enables monitoring, benchmarking, and evaluating sustainability performance in the supply chain. Addressing the issue of animal welfare within a food supply chain requires cooperation among companies at different stages of the supply chain. Companies should engage in initiatives that improve transparency, communication, data collection, and data sharing. A certification system enables communication between different supply chain stages, while a farm management data system is well suited to handle quantitative data and to calculate animal welfare indicators.

Related Hotspots

- 1. Supply Chain Transparency
- 3. Housing - Farm Stage
- 4. Animal Handling - Farm Stage
- 5. Culling Procedures - Farm Stage
- 6. Health & Injuries - Farm Stage
- 7. Painful Procedures - Farm Stage
- 9. Animal Handling - Slaughter Stage
- 10. Animal Handling - Transportation Stage

References

- Bryan, Barry & Marvanek, 2009
- Deimel, Frentrup, & Theuvsen, 2008
- Maloni & Brown, 2006

15. Implement an animal welfare policy

Implement a policy that sets goals for supply chain partners to commit to farm animal welfare issues. The policy should include a clear statement for why animal welfare is important to the company, a commitment to comply with relevant legislation, a statement on expected farm animal welfare standards, a commitment to continuous improvement and public disclosure on animal welfare performance, and a description of the processes to ensure an effective implementation of a policy (e.g., senior management oversight, performance monitoring, or corrective actions).

Related Hotspots

- 1. Supply Chain Transparency

References

- D'Silva, 2006
- Gregory, 2008
- The Business Benchmark on Farm Animal Welfare, 2016





16. Implement animal welfare best practices at beef cattle farms, during transport, and at slaughter

Seek collaboration with your supply chain partners to implement best practices on farms, during transport, and prior to slaughter that maximize animal welfare. Considerations at the farm level include best practices associated with housing circumstances, painful procedures, euthanasia, and handling. Considerations during transport include loading density, temperature and moisture control, ventilation, and transportation time. Considerations prior to slaughter include effective stunning, handling of animals, slaughter equipment, alternative procedures, and timing of activities.

Related Hotspots

1. *Supply Chain Transparency*
2. *Cow-Calf Management - Farm Stage*

References

- D'Silva, 2006
- Gregory, 2008



References

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http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements
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- B** Beef Quality Assurance (BQA) Manual: Manual of the Beef Quality Assurance Program. <http://www.bqa.org/Media/BQA/Docs/nationalmanual.pdf>
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http://www.fve.org/uploads/publications/docs/fve_08_043_paper_herd_health_plan_final.pdf



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Release Notes

*** 01.02.10, May 2021 ***

- In-text references and broken resource links (URLs) included in the KPI guidance were updated to the most recent available versions. Where no alternative resource was available, the item was substituted with a comparable resource or was removed.

01.02.10, May 2020

- In-text references and broken resource links (URLs) included in the KPI guidance were updated to the most recent available versions.

01.02.10, June 2019

- Broken links referenced in the KPI guidance were corrected.

01.02.10, June 2018

- Broken links referenced in the KPI guidance were corrected.

01.01.10, June 2017

- No change from version 01.01.10, January 2017

TSC's Multi-stakeholder Process

The Sustainability Consortium (TSC) is a multi-stakeholder organization comprised of leading companies, non-profit organizations, and other members that represent broad perspectives on sustainability. To build a KPI set that can be deployed widely, TSC acknowledges that members have diverse points of view. As such, the attributes, activities, KPIs, and scoring used in this KPI set represent a composite perspective of the current market and are not necessarily the views, policies, or program of any single member of TSC.

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