

Global Animal Partnership's 5-Step® Animal Welfare Pilot Standards for Dairy Cattle v1.0



About Global Animal Partnership's (G.A.P.) Animal Welfare Certified™ Program

G.A.P.'s Animal Welfare Certified™ Program consists of a series of species specific multi-tiered standards designed to assess farm animal welfare within different production systems. Each set of tiered standards—from Step 1 to Step 5+—has its own requirements that must be met before certification to that Step level is achieved.

As the standard-setter, Global Animal Partnership does not conduct audits nor make Step-level certification decisions but rather accredits third-party certifiers to administer the Program. Authorized, third-party certifiers perform the audits and issue Step certificates, as appropriate. As such, producers, consumers, and retailers alike can be confident that Step-levels are fair, accurate, and free of conflict of interest.

For a company/brand to use the G.A.P. label in the marketplace, 100% of the product must come from farms that hold a current G.A.P. certificate. Use of the G.A.P. label is governed by G.A.P.'s Labelled Product Authorization program (LPA) and the regulations of the country the label will be used in.

G.A.P. believes that meaningful label claims, validated by third-party audits on every farm, are key to influencing the industry, raising consumer expectations, and creating long-lasting change for animals.

About the G.A.P.'s 5-Step® Animal Welfare Pilot Standards for Dairy Cows

G.A.P.'s 5-Step® Animal Welfare Pilot Standards for Dairy Cattle v1.0 was issued on July 1, 2021. The development process included consultation with dairy industry representatives, veterinarians and producers, guidance from our Scientific Advisory Committee¹ and other scientific experts, an extensive consultative process, beta-testing, and review and approval by the Global Animal Partnership Board of Directors.

G.A.P.'s 5-Step® Animal Welfare Pilot Standards for Dairy Cows v1.0 covers the management of calves, heifers, dry cows and lactating cows.

¹ For more information on G.A.P.'s Scientific Advisory Committee, please visit www.globalanimalpartnership.org.

After three (3) certification cycles, the pilot standards will be reviewed and revised based on key learnings from the pilot launch, as well as any new, relevant scientific findings. The post-pilot review and revision process will again involve guidance from scientific experts, veterinarians and producers, beta-testing, and public consultation, before the draft revision is presented to the G.A.P. Board of Directors for final review and approval. Thereafter, the standards will be reviewed and revised according to the protocol outlined in the G.A.P. Policy Manual.

At any time throughout the above-mentioned period, G.A.P. may clarify parts of the standard as issues with implementation arise, new technologies become available, or new scientific findings are made.

About Global Animal Partnership

Global Animal Partnership (G.A.P) is one of the largest, and most respected animal welfare standards and labeling organizations in North America. Established in 2008, G.A.P. impacts the welfare of over 416 million animals each year through third-party certification of more than 3,900 farms. G.A.P. believes that meaningful label claims, validated by third-party audits on every farm, are key to influencing the industry, raising consumer expectations, and creating long-lasting change for farm animals. For more information, contact us at info@globalanimalpartnership.org or 877.427.5783.

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Program Overview

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The marketing claims used in this Program Overview apply to every terrestrial farm animal species G.A.P. has standards for; however, the descriptions of the system and management highlights are specific to each species. The G.A.P. standards focus on farm animal welfare, the management of the animals, and environment they are raised in. Using the same G.A.P. Animal Welfare Certified Step-level claim on labels for terrestrial farm animal species provides consumers with a consistent message across species and helps with a general understanding of the system of production.

Below is a topline summary of the different Step levels.

Step Level	Marketing Claims	Description of System	Management Highlights
	Animal Welfare Certified	Dairy cattle are typically managed in an indoor system and are provided space and resources to express natural behavior.	Cows are typically housed indoors. Tie-stalls are prohibited after December 31, 2026 – in the interim, cows are untied daily. Calves are pair- or group- housed and must be at least 56 days old before they are weaned. Disbudding must be conducted with pain relief. Dehorning, branding, and tail-docking are prohibited at Step 1 and higher. Environmental enrichments are provided to animals. All operations carry out bimonthly cow comfort assessments at Step 1 and higher throughout the certification cycle, and a calf, heifer and dry cow comfort assessments once, midway through their certification cycle.
	Enriched environment	Dairy cattle are typically managed in an indoor system and are provided space, resources, and enrichments to express natural behavior. By Jan 1, 2023, custom heifer growers must be G.A.P. Certified.	Cows are housed in loose-housed systems. Tie-stalls are prohibited at Step 2 and higher. Dry cows must have access to an outdoor area for at least 30 days each dry period. Calves are pair- or group- housed and must be at least 12 weeks old before they are weaned. If the operation disbuds, the procedure must be conducted with pain relief. Two different types of environmental enrichments are provided to animals.
	Outdoor access	Dairy cattle are managed either in a dry lot system or in an indoor system with unrestricted access to an outdoor pen.	All cattle must have access to an outdoor area but do not have to be pasture. Calves are pair- or group- housed and must be at least 16 weeks old before they are weaned. If the operation disbuds, the procedure must be conducted with a sedative and pain relief, and the operation must include some polled genetics.

	Pasture Raised	Dairy cattle are on pasture for at least 120 days each calendar year.	Cattle spend at least 120 days each calendar year on pasture. Pasture includes access to grassland, planted pastures, managed pastures, wooded areas, and any other land where cattle have access to vegetation. Calves are pair- or group- housed and must be at least 16 weeks old before they are weaned. If the operation disbuds, the procedure must be conducted with a sedative and pain relief, and the operation must include some polled genetics.
	Animal Centered	Dairy cattle are on pasture for at least 120 days each calendar year. Replacement stock must be reared on-farm. Calves must stay with their dams until 24 weeks of age.	Cattle spend at least 120 days each calendar year on pasture. Pasture includes access to grassland, planted pastures, managed pastures, wooded areas, and any other land where cattle have access to vegetation. Calves stay with their dam or nurse cow until weaning at 24 weeks. Disbudding and supernumerary teat removal is prohibited at Step 5 and higher.
	Entire Life on Farm	Dairy cattle are on pasture for at least 200 days each calendar year. Replacement stock must be reared on-farm. Calves must stay with their dams until 24 weeks of age.	Cattle spend at least 200 days each calendar year on pasture. Pasture includes access to grassland, planted pastures, managed pastures, wooded areas, and any other land where cattle have access to vegetation. Calves stay with their dam or nurse cow until weaning at 24 weeks.

How to Read these Standards

Standards applicable to a Step level are designated with a • symbol in the corresponding Step column. The **M** indicates the standard is considered a major non-conformance (see [Non-conformances](#) section below for more details). If there is a **C** beside the standard it is considered a critical non-conformance (see [Non-conformances](#) section below for more details).

In the example below, the standard is required for each Step level, Step 1 through Step 5+:

STANDARD	Step Level					
	1	2	3	4	5	5+
2.1 General Records Requirements						
2.1.1 M	Records must be written and made available to the auditor and/or certification company. Acceptable formats include, but are not limited to, record sheets and cards, calendars, notebooks, electronic records (e.g., apps and e-readers) as well					
	•	•	•	•	•	•

	as other computer records.					
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In the next example, Standard 7.4.2 is required only for Step 1, Standard 7.4.3 is required only for Step 2, Standard 7.4.4 is required only for Steps 3 and 4, and Standard 7.4.5 is only required for Steps 5 and 5+.

STANDARD		Step Level					
		1	2	3	4	5	5+
Subclinical Monitoring of Mastitis							
7.4.2	Monthly average bulk tank SCC must not exceed 200,000 cells/ml.	•					
7.4.3	Monthly average bulk tank SCC must not exceed 175,000 cells/ml.		•				
7.4.4	Monthly average bulk tank SCC must not exceed 150,000 cells/ml.			•	•		
7.4.5	Monthly average bulk tank SCC must not exceed 100,000 cells/ml.					•	•

In addition, the ⓘ symbol prefaces additional information provided to aid in the understanding of the standard:

STANDARD		Step Level					
		1	2	3	4	5	5+
Colostrum							
4.6.2	Operations must test the quality of colostrum of each cow providing colostrum. If colostrum quality is less than 50 mg/ml of immunoglobulin G (IgG) then the calf must receive alternative high-quality colostrum.	•	•	•	•	•	•
	ⓘ [4.6.2 a]: <i>Colostrometers or refractometers (i.e., Brix meters) can be used on-farm to measure colostrum quality.</i>						
	ⓘ [4.6.2 b]: <i>Colostrum that measures >22% with a refractometer or measures 'green' in a colostrometer is considered high-quality.</i>						
	ⓘ [4.6.2 c]: <i>Alternative high-quality colostrum includes commercially available colostrum replacer/supplement.</i>						

Terminology

In this set of standards, the following terms will be used to identify which age / stage of production the standard applies to.

Unweaned calf: a calf that is being fed milk or milk replacer.

Weaned calf: a calf that is no longer receiving milk or milk replacer.

Heifer: a female cow which has not calved or has calved for the first time.

Dry cow: a cow that is between lactations and no longer producing milk. The dry period typically lasts 40-65 days. Dry cows are typically divided into two groups: far off (60-21 days before calving) and close-up (within 21 days of expected calving).

Lactating herd: includes all animals that are being milked (fresh cows, first lactation heifers, mature lactating cows).

As well, G.A.P. uses the term **operation** to denote a farm or ranch raising animals (see definition under [Program Requirements](#) 1.c).

Please note, the [Glossary](#) provides more detailed information of other terms used in the standard.

Program Requirements

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The following is applicable to each operation applying for certification to Global Animal Partnership's 5-Step® Animal Welfare Pilot Standards for Dairy Cattle.

1. General

- a. The standards in this document are requirements.
- b. The operation must have read the standards and prepared for the audit, or they cannot be certified.
- c. The term “operation” is defined as a single business entity (e.g., sole proprietorship, partnership, limited liability company or corporation) that meets all the following criteria:
 - i. all staff and animals are under the direct supervision* of the single business entity;
 - ii. the single business entity owns all the animals; and
 - iii. a single business entity may have more than one location that is owned, rented or leased where the animals are kept; however, if the other location(s) are located more than 1-hour driving distance from the main certified farm business entity, then those additional location(s) would need a separate audit, due to differences in geography, topography, pasture conditions, and/or management, and be deemed separate ‘operations’ to ensure the integrity of the program.

**Direct supervision is defined as being when an employee (paid by the operation) of a certified single business entity is responsible for the animals on the farm that is at a separate location to the main farm. If the person responsible for the management and care of the animals at a separate location to the main certified business entity is a contract farmer and not an employee, then that site is considered a separate operation – even if there is routine oversight from an employee of the main operation.*
- d. All parts of the supply chain, except for those indicated within this standard, must be G.A.P. Certified in order to use the G.A.P. label (including farms, processors, and brands). Farms must adhere to this standard. Processors and brands must adhere to G.A.P.'s Labeled Product Authorization Program. (See [Section 1.4](#) Specialized Heifer Rearing Operation for further information during the pilot standard)
- e. The G.A.P. Policy Manual is a companion document to the standards, and details additional program requirements and terms of certification beyond that which is included in the standards (see www.globalanimalpartnership.org/).
- f. In addition to the Terminology Section on page 11, a glossary defining specific terms and terminology used in these standards is located at the end of the Program Requirements.
- g. Each dairy cattle operation must be audited once every certification cycle by an accredited third-party certifier. A certification cycle is 15-months, which allows for cattle and operations to be assessed seasonally over a 5-year period. For processors and brands please refer to G.A.P.'s Labeled Product Authorization Program.
- h. Each Step level—Step 1 through Step 5+—has its own requirements that must be met to be certified to that level. If an operation, for example, meets some but not all Step 2 requirements, but 100% of the requirements for Step 1, then the operation is able to achieve Step 1 certification. Please refer to G.A.P.'s Chain of Custody Manual for further information.
- i. This standard applies to cattle being raised to supply milk and milk products. Any operation wishing to also market meat or meat products as G.A.P. Certified (including, but not limited to, calves, veal calves and cull dairy cattle), must meet and be certified to G.A.P.'s 5-Step® Animal Welfare Standards for Beef Cattle.
- j. No standard in this document supersedes governmental regulations or laws, whether local, regional, state, provincial, territorial, federal, national, or other.

2. Applications

- a. Each operation is required to submit a completed 5-Step® Animal Welfare Dairy Cattle application for each certification cycle. A designated representative affiliated with a supplier group may complete the application on behalf of an operation.
- b. Within this application, operations must identify all sites (either owned, leased, and/or shared) used to manage dairy cattle to the 5-Step® Animal Welfare Pilot Standards for Dairy Cattle.
- c. Applications, as well as this document, producer resources, and G.A.P.'s Policy Manual can be downloaded at www.globalanimalpartnership.org/.

3. Audit and Certification

- a. Each operation must submit a complete G.A.P. Animal Welfare Certified for Dairy Cattle application and be audited and certified by an accredited third-party certifier prior to seeking pre-authorization from G.A.P. to market any milk or milk products as G.A.P. Certified.
- b. Operations must have animals (e.g., cows, heifers and calves) on site at the time of the audit.
- c. At the time of audit, the person(s) responsible for managing the operation and any animal caretaker responsible for specific animal groups (e.g., milkers, calves, heifers, lactating herd, dry cows) must be present. A designated representative affiliated with a supplier group may also be present at the time of the audit.
- d. After submission of a completed G.A.P. Animal Welfare Certified for Dairy Cattle application, the third-party certifier will provide each operation with G.A.P.'s pre-audit submission list detailing the records and plans that need to be submitted for review **prior** to the audit occurring. Operations will need to provide all requested documents for review within the timeframe specified by the third-party certifier prior to the on-site audit occurring. This allows for the on-farm audit to focus on the animals, their environment and management rather than spending time reviewing records on-site.
- e. To facilitate implementation of this standard within the context of on-going business, **at initial audit only**, G.A.P. will apply a grandfather clause for any animals currently on-site and, providing the operation is successfully certified, those animals will be eligible to produce G.A.P. Certified milk.
- f. All applicable standards, including those that may be controlled or managed by, or contracted to, another business/operator (e.g., the processor; heifer rearer; a transporter; a producer group, co-operative, or marketing entity etc.), will be assessed for compliance by the certifier and incorporated into its overall assessment of the operation prior to the final Step-level determination.
- g. G.A.P. is piloting the use of video and/or other monitoring to substantiate compliance to some of the standards within this document. Use of technology is not a requirement but can be used in place of specified observations (if not specified within the standard, please seek guidance from G.A.P). All operations must follow the requirements laid out with the specific technology option, for the timeframe listed, for its use to be considered compliant.
- h. Auditors do not make Step-level determinations nor provide consultative service to producers on meeting standards requirements. Step-level determinations are made by reviewers of accredited certifiers.
- i. If in a situation or circumstance, a standard as written might compromise the welfare of the cattle in the producer's care, the producer should complete a deviation request form and submit to G.A.P. for consideration.

4. Non-Conformances

Note: This section provides a brief overview of the provisions of the G.A.P. Policy Manual relating to non-conformances. For further information please refer to that document.

- a. If an operation fails to meet a standard, it will be considered a non-conformance.
- b. Any non-conformance identified by the accredited certifier, must be closed out by the certifier prior to a Step-level being assigned and a certificate issued. (See G.A.P.'s Policy Manual for further information).
- c. There are three categories of non-conformance: minor, major and critical.
- d. If an operation receives a repeat non-conformance at the time of the next audit – the designation of minor, major and critical impacts the certification decision (see G.A.P.'s Policy Manual for further information).
 - i. In the example below, the **C** indicates that failure to meet the standard would be considered a critical non-conformance. All **C** categorized standards result in certificate denial (see G.A.P.'s Policy Manual for further information).

STANDARD		Step Level					
		1	2	3	4	5	5+
4.3 Handling							
4.3.2 C	Willful acts of abuse and/or egregious acts towards all animals on-farm are prohibited. Examples of these behaviors include, but are not limited to dragging animals, intentionally applying prods to sensitive parts, deliberate slamming of gates on animals, malicious driving of ambulatory animals, and hitting, beating, throwing, punching, or kicking an animal.	•	•	•	•	•	•
i [4.3.2]: Examples from: NAMI's Recommended Animal Handling Guidelines & Audit Guide, September 2019, rev. 2.							

- ii. In the example below, the **M** indicates that failure to meet the standard would be considered a major non-conformance. If at recertification, this standard is still not in compliance, the category is escalated from a major to a critical and the operation is denied (see G.A.P.'s Policy Manual for further information).

STANDARD		Step Level					
		1	2	3	4	5	5+
3.7 Non-Ambulatory/Downer Animals							
3.7.2 M	All non-ambulatory animals must be assessed and then treated or euthanized.	•	•	•	•	•	•
i [3.8.2]: See Section 3.9 for acceptable euthanasia methods.							

- iii. In the example below, as there is no **C** or **M** beside the standard, this means that the standard is classified as a minor non-conformance if it fails to be met. If at recertification, this standard was still not in compliance, then the category is escalated from a minor to a major non-conformance. If at the third certification cycle, this standard was still not in compliance, then the category is escalated further from a major to a critical non-conformance and the operation is denied certification (see G.A.P.'s Policy Manual for further information).

STANDARD		Step Level					
		1	2	3	4	5	5+
3.7 Hospital Pens							
3.7.1	Any sick and/or injured animals must be segregated from healthy animals when necessary.	•	•	•	•	•	•
	① [3.6.1 a]: <i>Cattle are herd animals, and in cases of minor health problems, are more likely to recover when they can be treated within a group setting. However, if an individual is unable to function as a normal member of the herd (e.g., cannot keep up with herd movements or are unable to eat or drink without special provision or if they are infectious), it may be necessary to segregate them from the rest of the group.</i>						
	① [3.6.1 b]: <i>Segregation can be within an existing pen, paddock, or a designated hospital pen.</i>						

- e. If an operation is issued a major or minor non-conformance, the operation must submit a corrective action to the certifier within 21-days (3 weeks) from the date the certifier issues the audit report and be accepted by the certifier as an acceptable response to the non-conformance, before a certificate is issued. If the operation does not respond to the non-conformance within 21 days (3 weeks), it will result in a shortened certificate or re-audit once an acceptable response is received (see G.A.P.'s Policy Manual).
- f. At renewal, if an operation fails to meet a standard that is specific to their Step-level, it will drop to the applicable Step-level, or lose certification as appropriate, unless the Certifier applies their discretion to issue a non-conformance **if and only if**:
 - i. the standard that is out of conformance is not a repeat from the previous audit; and
 - ii. the Certifier is confident the operation will be able to achieve and maintain the level specified in the standard; and
 - iii. the operation is only out of conformance with one standard relating to the Step level the operation is looking to achieve.

5. Use of the G.A.P. label, logo, and related trademarks.

- a. In order to use the G.A.P. label/mark and/or the G.A.P. name, you must complete an application and have received written approval from G.A.P. Any unauthorized use will be considered a trademark infringement. Please contact info@globalanimalpartnership.org or your G.A.P. representative to apply.
- b. Use of the G.A.P. label on carton labels, retail ready packaging and work-in process (WIP) items, must also comply with country regulatory requirements in addition to the [G.A.P. Brand Book](#) and licensing agreement.

Producer resources, prep tools and other Program Documents can be found at www.globalanimalpartnership.org/standards/dairy/.

1 BREEDING, SELECTION CRITERIA, ANIMAL SOURCING AND REPLACEMENT STOCK

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STANDARD	Step Level					
	1	2	3	4	5	5+
1.1 Breeding						
<i>It is well documented that genetic selection can positively and negatively impact traits that influence an animal's welfare. Breeding management is not only an integral component to dairy farming when it comes to productivity, but also a tool that producers can utilize to achieve higher animal welfare within their herd.</i>						
1.1.1	Heifers must not be bred until they are at least 55% of their expected average mature weight.					
	① [1.1.2 a]: Average mature weight can be calculated using weight tapes, or weight sampling.					
1.1.2	Artificial Insemination (AI), Embryo Transfer (ET), and Ovum Pick Up (OPU) must be performed by a trained person, service technician or veterinarian.					
	① [1.1.2 a]: If an operation wishes to use a reproductive procedure (other than natural breeding) that is not listed above, written approval from G.A.P. must be received prior to on-farm use.					
	① [1.1.2 b]: The use of sexed semen is permitted.					
	① [1.1.2 c]: The use of semen from beef breeds is permitted.					
1.1.3	Embryo Transfer (ET) and Ovum Pick Up (OPU) procedures may only be used if an epidural anesthetic is provided during embryo flushing/oocyte collection and transfer. Records must be kept.					
	① [1.1.3]: It is understood that both ET and OPU are breeding tools that can yield changes more quickly; however, the process can cause cows some discomfort. The use of an epidural anesthetic is required so that cows do not experience discomfort from the procedure.					
1.1.4 ^M	Embryo Transfer and Ovum Pick Up are prohibited.					
1.1.5 ^M	Operations must not intentionally use genetically modified or cloned cattle, their progeny, or semen.					
	① [1.1.5]: Progeny in this context, only extends to one generation.					
1.2 Breeding Selection Criteria						
1.2.1	Breeding selection criteria for dairy cattle must include, at a minimum: a. health; b. conformation; and c. calving ease.					
	① [1.2.1]: Criteria for retaining or purchasing breeding stock in order to avoid welfare problems will be discussed during the audit. Examples could include selection of dairy cattle for breeding which display good conformation (e.g., rear legs, foot angle etc.), improved health (e.g., immunity+, resistance to diseases like mastitis, ketosis, retained placenta etc.) and calving ease.					
1.2.2	Breeding/replacement stock must be selected for the type of system and climate in which they are raised.					
	① [1.2.2]: It is important to select animals for the production system being used by the farm so that animals are better able to deal with, and adapt to, the farm environment, production model and feeding program (i.e., cold, heat, grazing, robotics, etc.).					

STANDARD		Step Level					
		1	2	3	4	5	5+
1.2 Breeding Selection Criteria <i>Continued</i>							
1.2.3	Breeding/replacement stock selection criteria must also include mothering ability.					•	•
	① [1.2.3]: At Steps 5 and 5+ calves must be reared by their dams or nurse cows (see Standard 4.6.8) so it is integral to the system to have cows with good mothering ability in the herd.						
1.2.4	If the operation disbuds, there must be a written plan to use polled genetics in the herd.		•				
	① [1.2.4 a]: See Section 4.7 on disbudding. ① [1.2.4 b]: The plan must include trialing some polled genetics during each certification cycle.						
1.2.5	If the operation disbuds, at least 10% of animals per year must be bred to select for polled genetics. Records must be kept.			•	•		
	① [1.2.5 a]: This percentage will be reviewed at the end of each certification cycle. The intent of this standard is to support the development of more polled genetics available to the marketplace. ① [1.2.5 b]: Steps 5 and 5+ are not included in this standard as disbudding is prohibited.						
1.3 Replacement Stock							
<i>Replacement stock includes any female dairy animals, purchased or home bred, and raised with the intent to replace cows in the milking herd.</i>							
<i>It's G.A.P.'s future intent to require that all replacement stock for Steps 1-4 come from G.A.P. Certified operations. However, for the duration of the Pilot standard, G.A.P. will collect data on replacement rates, ages, sources, and travel distances of off-farm purchases of bred heifers and mature cows to determine how this requirement could be implemented in v2.0.</i>							
1.3.1	Sourcing replacement stock is allowed only if cattle are sourced from: a. farm-to-farm/direct sales; or b. video auction.		•	•	•	•	
	Records of numbers and source of replacement stock must be kept. ① [1.3.1 a]: This standard allows replacement stock to be procured from dairy herd dispersal and live internet sales. ① [1.3.1 b]: This standard does not include bulls which may be sourced outside of these requirements.						
1.3.2	Female replacement stock must be born and reared on-farm.					•	•
1.3.3	Sourcing breeding bulls is allowed only if cattle are sourced from: a. farm-to-farm/direct sales; or b. video auction.					•	•
	Records of numbers and source of all breeding bulls must be kept. ① [1.3.3]: This standard includes any bulls used for breeding.						

STANDARD	Step Level					
	1	2	3	4	5	5+
<p>1.4 Specialized Heifer Rearing Operations / Custom Dairy Heifer Growers <i>Many dairy farms send their calves to be reared by specialized heifer operations off the farm. These animals typically rejoin the herd just before their first calving. During the pilot standard G.A.P. will be collecting further information about the scope and use of specialized rearing operations.</i></p> <p><i>The standards below cover requirements for farms seeking certification for Steps 1 through Step 4. There are no requirements for Step 5-5+ because, at these levels, operations must home-breed and raise their own replacement stock.</i></p>						
1.4.1 ⓘ	<p>Until December 31, 2022, heifer calves being shipped off the operation to specialized heifer rearing operations must not be shipped off the operation until they are at least 5 days of age.</p>					
1.4.2	<p>By January 1, 2023, if an operation is: a. using a G.A.P. Certified specialized heifer rearing operation, calves must be sent after 5 days of age; or b. using a non-G.A.P. Certified specialized heifer rearing operation, calves must be sent after weaning.</p>					
	<p>① [1.4.2 a]: Specialized heifer rearing operations will be able to obtain their own G.A.P. certification, should they choose to do so, by meeting the requirements in this Standards that are applicable to their system. ① [1.4.2 b]: See Section 4.6 for colostrum management in calves and weaning ages by Step level. ① [1.4.2 c]: Operations using 1.4.2 a. must have a copy of the G.A.P. certificate for the specialized heifer rearing operation on file. ① [1.4.2 d]: This requirement is being phased into the standard as it is understood that operations will need to adjust heifer rearing management and/or housing to meet the requirements of the standard. Operations should use the phase in time to co-ordinate with their Specialized Rearing Facility(ies) to plan and obtain certification.</p>					

2 GENERAL RECORDS, TRACEABILITY AND HERD HEALTH PLANS

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STANDARD		Step Level					
		1	2	3	4	5	5+
2.1 General Records Requirements							
2.1.1 ⓘ	Records must be written and made available to the auditor and/or certification company. Acceptable formats include, but are not limited to, record sheets and cards, calendars, notebooks, electronic records (e.g., apps and e-readers) as well as other computer records.	•	•	•	•	•	•
2.1.2	Records must be presented in an organized manner.	•	•	•	•	•	•
2.1.3	All records, reports, Step certificates, and other materials and correspondence relating to Step certification must be kept for at least 15 months following the expiration of the certificate (i.e., 1 certification cycle) following the end date of the certificate.	•	•	•	•	•	•
2.2 Traceability/Chain of Custody for Certified Milk							
<p>ⓘ <i>If the operation is only selling raw milk to a processor, the standard in Section 2.2 are the only requirements the operation is responsible for.</i></p> <p>ⓘ <i>G.A.P.'s Chain of Custody for Labelled Products contains further information on program requirements for milk and milk products.</i></p>							
2.2.1 ⓘ	<p>For each shipment of G.A.P. Certified raw milk there must be a record of:</p> <ol style="list-style-type: none"> the date of transport; the volume of raw milk shipped off farm; Step level; Certificate number; Certifier; and Certificate expiry date. 	•	•	•	•	•	•
<p>ⓘ [2.2.1 a]: <i>Identification can include paper transport records or electronic records.</i></p> <p>ⓘ [2.2.1 b]: <i>This information can be added to existing documentation and does not need to be a standalone document.</i></p>							
2.3 Herd Health Plans							
<i>Having a plan facilitates both forward planning and historical review. Its purpose is to provide standard operating procedures (SOP's) and an overview of the farm system for employees and contractors, as well as auditors and assessors, but can also be useful for setting yearly benchmarks and targets, historical reference, making business decisions, training, and preparing for and managing risks.</i>							
2.3.1	<p>The operation must have a written plan describing:</p> <ol style="list-style-type: none"> an overview of the operation, including size, location, typical climatic conditions; operational practices and policies (i.e., SOP's) for dairy cattle; including <ol style="list-style-type: none"> provision for daily feed and water, including ration details for the different stages of production/categories kept on-farm (calves, heifers, far-off cows, close-up cows, lactating cows); preventative health strategies (e.g., supplementation, vaccination); monitoring programs (e.g., somatic cell count, Johne's, BVD-PI); 	•	•	•	•	•	•

STANDARD	Step Level					
	1	2	3	4	5	5+
2.3.1 Herd Health Plans <i>Continued</i>						
<i>...Continued from previous page</i>						
<ul style="list-style-type: none"> iv. breeding protocols (including hormonal treatment, AI, ET and OPU); v. milking parlor protocols; vi. calving, calf care and colostrum management protocols; vii. routine husbandry procedures (e.g., disbudding, hoof trimming, pregnancy checking); viii. pain relief protocols; ix. care of sick, ill and/or injured animals, including cull cows, downer animals, and on-farm euthanasia; x. management of outdoor areas and pasture (if applicable); xi. rodent and predator control practices (if applicable); and xii. housing management (e.g., bedding, pen cleaning, calf hutches, ventilation). 						
c. emergency action plan including:						
<ul style="list-style-type: none"> i. all potential natural disasters for their area (e.g., hurricane, tornado, flood, wildfire, drought and/or blizzard); ii. animal disease outbreak (including enhanced biosecurity); iii. management of animals if disease outbreak reduces availability of human resources (e.g., COVID-19 pandemic); iv. fire(s) on-site; v. humane methods of mass euthanasia on-farm should depopulation be required; vi. water shut off (if applicable); and vii. power failure. 	•	•	•	•	•	•
d. biosecurity plan including:						
<ul style="list-style-type: none"> i. procedures for bringing any animals on-farm (e.g., heifers returning from specialized heifer rearing operations, purchased animals); ii. procedures and policies for employees (e.g., employees are restricted from owning certain types of livestock or bringing pets to the farm with them); iii. procedures and policies for visitors to the operations (e.g., provision of foot baths, booties, and protective clothing; minimizing visitors; visitor logs); iv. milk trucks, feed trucks, hoof trimmers and equipment delivery to the operation; v. shared borders with neighboring operations (e.g., having a buffer area between your property and your neighbor’s), (if applicable); and vi. clean-out procedures of housing and pens between groups of cattle. 						


STANDARD		Step Level					
		1	2	3	4	5	5+
2.3.1 Herd Health Plans <i>Continued</i>							
	<p>① [2.3.1 a]: Operations can utilize existing plans if they cover the topics listed above.</p> <p>① [2.3.1 b]: The written herd health plan can be provided by an affiliated group (e.g., a producer group, co-operative, etc.) or created with the aid of external consultation (e.g., extension agents, veterinarians, peers), but must include information specific and relevant to the operation applying for G.A.P. certification.</p> <p>① [2.3.1 c]: All the examples used above are to illustrate the intent of the standard. Each plan should be formulated to the specific needs and/or risks specific to the farm.</p>						
2.3.2	<p>Herd health plans must be reviewed and signed annually by a veterinarian.</p> <p>① [2.3.2]: See Standard 3.1.1 for Veterinary Client Patient Relationship (VCPR) requirement.</p>	•	•	•	•	•	•


3 ANIMAL HEALTH











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STANDARD		Step Level					
		1	2	3	4	5	5+
3.1 Veterinarian-Client-Patient-Relationship (VCPR)							
	The operation must maintain a Veterinarian-Client-Patient Relationship (VCPR). To substantiate the VCPR, the operation must have a letter on file that states that all components of a VCPR are present (see G.A.P.'s definition of a VCPR in the informational note below), and the letter must be signed and dated by the operation's veterinarian within the previous 12 months.	•	•	•	•	•	•
	<p>① [3.1.1 a]: G.A.P. has created a template VCPR acknowledgement letter, which the operation can choose to use to substantiate compliance with this Standard. The template can be found at www.globalanimalpartnership.org.</p> <p>① [3.1.1 a]: G.A.P. has adopted the American Veterinary Medical Association's (AVMA) definition of a VCPR which states: "A VCPR is present when all of the following requirements are met:</p> <ol style="list-style-type: none"> 1. The veterinarian has assumed the responsibility for making clinical judgements regarding the health of the patient and the client has agreed to follow the veterinarians' instructions. 2. The veterinarian has sufficient knowledge of the patient to initiate at least a general or preliminary diagnosis of the medical condition of the patient. This means that the veterinarian is personally acquainted with the keeping and care of the patient by virtue of a timely examination of the patient by the veterinarian, or medically appropriate and timely visits by the veterinarian to the operation where the patient is managed. 3. The veterinarian is readily available for follow-up evaluation or has arranged for the following: veterinary emergency coverage, and continuing care and treatment. 4. The veterinarian provides oversight or treatment, compliance, and outcome. 5. Patient records are maintained." 						
3.1.1							
3.2 Treatment							
	Sick or injured animals must be treated as soon as the injury or illness is discovered.	•	•	•	•	•	•
3.2.1	<p>① [3.2.1]: "Treatment" means that the operation must take appropriate action. This could include administration of veterinary medicine, application of salves or use of other alternative strategies as long as the animal is responding to treatment.</p>						
3.2.2	Veterinarian-prescribed treatments must be administered according to veterinarian guidance.	•	•	•	•	•	•

STANDARD		Step Level					
		1	2	3	4	5	5+
3.2 Treatment Continued							
3.2.3	Records must be kept of all sick and/or injured animal. Records must include: <ul style="list-style-type: none"> a. Date illness/injury was first noticed; b. Diagnosis/cause if known; c. animal based outcome score (see Section 5.1-5.6), if applicable. 	•	•	•	•	•	•
	<p>① [3.2.3 a]: This record includes non-ambulatory/downer animals (see Section 3.8) and animals with BCS less than 2 (See Section 5.1).</p> <p>① [3.2.3 b]: See 3.2.4 for requirements for records of treatments given.</p>						
3.2.4	Records must be kept of any treatment or drug (e.g., pain relief, medication, vaccinations, alternative remedies, probiotics) given to any individual or group of animals, including: <ul style="list-style-type: none"> a. name of the substance/product administered; b. animal identification; c. date of administration; d. method of administration; e. withdrawal time; and f. reason for treatment (including procedures such as disbudding). 	•	•	•	•	•	•
	① [3.2.4]: This standard is not intended to be used to evaluate the record, but rather to check the record keeping process.						
3.2.5	Animals with any of the following conditions that are not responding to treatment or additional management, must be euthanized: <ul style="list-style-type: none"> a. sick; b. injured; c. body condition score of < 2.0 (see Appendix I); or d. lameness score of 3 (see Appendix II). 	•	•	•	•	•	•
	① [3.2.5]: See Section 3.9 for acceptable euthanasia methods.						
3.3. Medication							
3.3.1	Off-label / extra-label use of medicines is prohibited unless prescribed by a veterinarian following country specific regulations (e.g., AMDUCA in USA).	•	•	•	•	•	•
	① [3.3.1]: See Standard 3.1.1 for VCPR requirement.						
3.3.2	Expired medication must not be administered to any animal.	•	•	•	•	•	•
	① [3.3.2]: Expired medication includes (i) medication that is expired at the time of audit; and (ii) medication that is beyond it's 'use by' date (i.e., 'use within x weeks/months' of opening), regardless of the actual expiration date.						
3.3.3	Any expired medication must be properly disposed.	•	•	•	•	•	•

STANDARD	Step Level										
	1	2	3	4	5	5+					
<p>3.4 Use of Medication</p> <p><i>In G.A.P.'s Animal Welfare standards for meat species, use of antibiotics, ionophores, arsenicals, beta-agonists, and sulfas are prohibited for sub-therapeutic use, and any market animal treated with any of these prohibited substances cannot be marketed as G.A.P. Certified. Any breeding animal treated therapeutically can still produce G.A.P. eligible market animals, but the breeding animals themselves cannot be marketed as G.A.P. Certified. These requirements have encouraged producers to evaluate and adjust practices on-farm in order to maintain eligibility for 'raised without antibiotics' programs. Consumer support of these requirements has led to a significant increase in the number of 'raised without antibiotics' animals in North America. Motivation around this requirement is not to deny sick animals' treatment, but rather to reduce the use of antibiotics and related medications as blanket tools in place of better management, as well as concern around antimicrobial resistance.</i></p> <p><i>The purpose of this section of the standard for Steps 1-3 is to work with producers, companies, nutritionists, and veterinarians to reduce the use of these substances across the entire operation with a specific focus on calves, heifers, and transition cows because more blanket treatment occurs in these stages of production than in the lactating herd.</i></p> <p><i>The overarching goal of this section is to use the pilot standards to work on strategies so that firm targets can be set and achieved to reduce the use of antibiotics and the other aforementioned substances. The requirements below are intended to be goal orientated, measurable, collaborative, and actionable with the understanding that there is no singular or 'one-size fits all' way of accomplishing the goals set by each operation. The standards are 'road mapped' in structure to provide producers with the ability to trial different strategies without jeopardizing the health and well-being of their entire herd.</i></p> <p><i>The multi-tiered structure of all G.A.P. standards allow for the inclusion of many different production systems, as well to roadmap change on-farm. While G.A.P. has outlined a path for operations certifying to Steps 1-3 to reduce the use of antibiotics and related substances on-farm, operations certifying to Steps 4-5+ will be prohibited from using antibiotics, ionophores, sulfas, and/or growth hormones as detailed below.</i></p> <p><i>G.A.P. will review how operations are implementing plans as part of our revision process for subsequent versions of this standard.</i></p> <p><i>The following standards in this Section are written for different age groups/stages of production – there are minor differences between these groups so please read each sub-section carefully.</i></p>											
For calves <6 months											
3.4.1 	<p>During the operation's first certification cycle, a written multi-year plan must be developed by each operation with input from the operation's vet, nutritionist and/or advisor to reduce the use of antibiotics, ionophores, and/or sulfas provided to calves.</p> <p>The plan must, at a minimum:</p>					•	•	•			

STANDARD		Step Level					
		1	2	3	4	5	5+
3.4.1 Use of Medication <i>Continued</i>							
For calves <6 months							
	<p>a. Identify the health risks that are currently being managed by antibiotics, ionophores, and/or sulfas;</p> <p>b. Set targets for a reduction in use of antibiotics, ionophores, and/or sulfas;</p> <p>c. Set targets for health performance;</p> <p>d. Identify at least two health management strategies the operation is interested in trialing;</p> <p>e. Determine how many calves and/or groups of calves the operation will use to test the strategies identified; and</p> <p>f. Be reviewed annually and amended, as necessary.</p>	•	•	•			
	<p>① [3.4.1 a]: This information will also be shared with G.A.P. through a signed confidentiality data sharing agreement that is part of the G.A.P. onboarding process.</p> <p>① [3.4.1 b]: This standard requires the operation to complete only the planning portion only during the first certification cycle.</p> <p>① [3.4.1 c]: It is understood that ionophores are used widely in calf starter rations to prevent coccidiosis and will probably be the focus of most plans.</p> <p>① [3.4.1 d]: Products that are not classified as antibiotics, ionophores and/or sulfas are acceptable for use in the required plan(s) (e.g., non-ionophore coccidiostats).</p>						
3.4.2	<p>From the operation's second certification cycle, and onwards from that point, each operation must implement the plan created in Standard 3.4.1. By the end of the second certification cycle and each certification cycle following, each operation must report to their Certifier on their progress.</p>	•	•	•			
	<p>① [3.4.2 a]: This information will also be shared with G.A.P. through a signed confidentiality data sharing agreement that is part of the G.A.P. onboarding process.</p> <p>① [3.4.2 b]: Compliance with this standard will not be assessed by evaluating the success of the plan, but rather on evaluating if the operation has implemented the plan as detailed.</p>						
3.4.3 	<p>Sub-therapeutic treatment of calves with antibiotics, ionophores, and/or sulfa drugs is prohibited.</p>				•	•	•
	<p>① [3.4.3 a]: This standard covers all potential delivery mechanisms – feed, water, supplement etc.</p> <p>① [3.4.3 b]: Any calves given sub-therapeutic treatment would be deemed ineligible for production of G.A.P. certified milk or milk products.</p> <p>① [3.4.3 c]: See Section 3.2 for prompt treatment of animals.</p> <p>① [3.4.3 d]: Sub-therapeutic treatment is a dose of treatment that is less/below what is used for treating disease or producing an optimal therapeutic effect. Sub-therapeutics are used preventatively and/or to promote growth.</p>						
3.4.4	<p>A written protocol must be implemented detailing how the operation ensures that any calves treated sub-therapeutically with antibiotics, ionophores, and/or sulfa drugs are excluded from the milking herd if they are reared to maturity.</p>				•	•	•

STANDARD	Step Level					
	1	2	3	4	5	5+
3.4. Use of Medication <i>Continued</i>						
Heifers >6 months to first calving (Steps 1-3 only)						
3.4.5 	As of January 1, 2024, sub-therapeutic use of antibiotics, ionophores, sulfas, and beta agonists is prohibited.					
	•	•	•			
	<p> [3.4.5 a]: This standard covers all potential delivery mechanisms – feed, water, supplement etc.</p> <p> [3.4.5 b]: It is understood that ionophores are currently used by many operations sub-therapeutically to promote growth post-weaning.</p>					
3.4.6 	<p>During the operation’s first certification cycle, a written multi-year plan must be developed by each operation with the advice of the operation’s vet, nutritionist and/or advisor to reduce the use of antibiotics, ionophores, and/or sulfas used for this animal category.</p> <p>The plan must, at a minimum:</p> <ol style="list-style-type: none"> Identify the health risks that are currently being managed by antibiotics, ionophores, and/or sulfas; Set targets for a reduction in use of antibiotics, ionophores, and/or sulfas; Set targets for health performance; Identify at least two health management strategies the operation is interested in trialing; Determine how many heifers and/or groups of heifers the operation will use to test the strategies identified; and Be reviewed annually and amended, as necessary. 					
		•	•	•		
	<p> [3.4.6 a]: This information will also be shared with G.A.P. through a signed confidentiality data sharing agreement that is part of the G.A.P. onboarding process.</p> <p> [3.4.6 b]: This standard requires the operation to complete only the planning portion only during the first certification cycle.</p> <p> [3.4.6 c]: It is understood that ionophores are used widely in feed rations to promote growth post-weaning and will probably be the focus of most plans.</p> <p> [3.4.6 d]: Products that are not classified as antibiotics, ionophores and/or sulfas are acceptable for use in the required plan(s) (e.g., non-ionophore coccidiostats).</p>					
3.4.7	<p>During the operation’s second certification cycle, and onwards from that point, each operation must implement the plan created in Standard 3.4.6. By the end of the second certification cycle and each certification cycle following, each operation must report to their certifier on their progress.</p>					
	•	•	•			
	<p> [3.4.7 a]: This information will also be shared with G.A.P. through a signed confidentiality data sharing agreement that is part of the G.A.P. onboarding process.</p> <p> [3.4.7 b]: Compliance with this standard will not be assessed by evaluating the success of the plan, but rather on evaluating if the operation has implemented the plan as detailed.</p>					

STANDARD		Step Level					
		1	2	3	4	5	5+
3.4. Use of Medication <i>Continued</i>							
Heifers >6 months to first calving (Steps 4-5+ only)							
3.4.8 	Heifers treated in the last trimester with antibiotics, ionophores, and/or sulfa drugs must be excluded from the milking herd that will produce G.A.P. certified milk.						
	<p> [3.4.8 a]: This standard applies whether treatments are given therapeutically or sub-therapeutically.</p> <p> [3.4.8 b]: See Section 3.2 for prompt treatment of animals.</p>						
Lactating herd (including close up transition cows)							
3.4.9 	<p>During the operation’s first certification cycle, a written multi-year plan must be developed by each operation with input from the operation’s vet, nutritionist and/or advisor to reduce the use of antibiotics, ionophores, and/or sulfas provided sub-therapeutically and/or therapeutically to the lactating herd.</p> <p>The plan must, at a minimum:</p> <ol style="list-style-type: none"> Identify the health risks that are currently being managed by antibiotics, ionophores, and/or sulfas; Set targets for a reduction in use of antibiotics, ionophores, and/or sulfas; Set targets for health performance; Identify at least two health management strategies the operation is interested in trialing; Determine how many cows and/or groups of cows the operation will use to test the strategies identified; and Be reviewed annually and amended, as necessary. 						
	<p> [3.4.9 a]: This information will also be shared with G.A.P. through a signed confidentiality data sharing agreement that is part of the G.A.P. onboarding process.</p> <p> [3.4.9 b]: This standard requires the operation to complete only the planning portion only during the first certification cycle.</p> <p> [3.4.9 c]: Products that are not classified as antibiotics, ionophores and/or sulfas are acceptable for use in the required plan(s) (e.g., non-ionophore coccidiostats).</p>						

STANDARD		Step Level					
		1	2	3	4	5	5+
3.4. Use of Medication <i>Continued</i>							
Lactating herd (including close-up transition cows) <i>Continued</i>							
3.4.10	During the operation’s second certification cycle , and onwards from that point, each operation must implement the plan created in Standard 3.4.9. By the end of the second certification cycle, and each certification cycle following, each operation must report to their certifier on their progress.	•	•	•			
	ⓘ [3.4.10 a]: This information will also be shared with G.A.P. through a signed confidentiality data sharing agreement that is part of the G.A.P. onboarding process. ⓘ [3.4.10 b]: Compliance with this standard will not be assessed by evaluating the success of the plan, but rather on evaluating if the operation has implemented the plan as detailed.						
3.4.11 M	Milk produced from cows that have been given antibiotics, ionophores, and/or sulfa drugs is prohibited from being marketed as G.A.P. Certified.				•	•	•
	ⓘ [3.4.11 a]: This standard applies whether treatments are given therapeutically or sub-therapeutically. ⓘ [3.4.11 b]: See Section 3.2 for prompt treatment of animals. ⓘ [3.4.11 c]: Treated cows could be retained as nurse cows.						
	Far-Off Dry cows						
3.4.12 M	During the operation’s first certification cycle , a written multi-year plan must be developed by each operation with the advice of the operation’s vet and/or advisor to reduce the use of intramammary antibiotic therapy for dry cow therapy. The plan must, at a minimum: <ul style="list-style-type: none"> a. Identify the health risks that are currently being managed by antibiotics; b. Set targets for a reduction in use of antibiotics; c. Set targets for health performance; d. Identify at least two health management strategies the operation is interested in trialing; e. Determine how many cows and/or groups of cows the operation will use to test the strategies identified; and f. Be reviewed annually and amended, as necessary. 	•	•	•			
	ⓘ [3.4.12 a]: This information will also be shared with G.A.P. through a signed confidentiality data sharing agreement that is part of the G.A.P. onboarding process. ⓘ [3.4.12 b]: This standard requires the operation to complete the planning portion only during the first certification cycle.						

STANDARD		Step Level					
		1	2	3	4	5	5+
3.4. Use of Medication Continued							
Far-Off Dry cows Continued							
3.4.13	During the operation's second certification cycle , and onwards from that point, each operation must implement the plan created in Standard 3.4.12. By the end of the second certification cycle and each certification cycle following each operation must report to their certifier on their progress.	•	•	•			
	<p>① [3.4.13 a]: This information will also be shared with G.A.P. through a signed confidentiality data sharing agreement that is part of the G.A.P. onboarding process.</p> <p>① [3.4.13 b]: Compliance with this standard will not be assessed by evaluating the success of the plan, but rather on evaluating if the operation has implemented the plan as detailed.</p>						
3.4.14 M	Milk produced from cows that have been given antibiotics, ionophores, and/or sulfa drugs during the dry period is prohibited from being marketed as G.A.P. Certified.				•	•	•
	<p>① [3.4.14 a]: This standard applies whether treatments are given therapeutically or sub-therapeutically.</p> <p>① [3.4.14 b]: See Section 3.2 for prompt treatment of animals.</p> <p>① [3.4.14 c]: Treated dry cows could be retained as nurse cows.</p>						
3.5 Bovine Somatotropin							
3.5.1 M	The use of artificial growth hormones, such as bovine somatotropin (bST), is prohibited.	•	•	•	•	•	•
	<p>① [3.5.1 a]: This includes both bST and recombinant bovine somatotropin (rbST).</p> <p>① [3.5.1 b]: bST is typically given to cows approximately two (2) months after calving until the end of lactation.</p>						
3.6 Parasites and Fly Control							
3.6.1	Operations must have a written plan for internal and external parasite prevention and control. Plans must include: <ul style="list-style-type: none"> a. the internal and external parasites that are a risk to all cattle on-farm by age or production category; b. actions other than use of veterinary treatments taken to prevent internal and external parasites; c. what triggers the plan to be implemented; and d. the treatment plan when internal or external parasites become a problem. 	•	•	•	•	•	•
	<p>① [3.6.2 a]: This applies to organophosphates in dust, rubs, sprays, ear tags, feed, or mineral blocks.</p> <p>① [3.6.2 b]: Glue fly strips for fly control are permitted as long as they do not come into contact with the animals.</p>						

STANDARD		Step Level					
		1	2	3	4	5	5+
3.7 Hospital Pens							

① Please also refer to Sections 3.8 and 4.3, respectively, for further information on downer animals and handling.

3.7.1 Any sick and/or injured animals must be segregated from healthy animals when necessary. • • • • • •

① [3.7.1 a]: Cattle are herd animals, and in cases of minor health problems, are more likely to recover when they can be treated within a group setting. However, if an individual is unable to function as a normal member of the herd (e.g., cannot keep up with herd movements or are unable to eat or drink without special provision or if they are infectious), it may be necessary to segregate them from the rest of the group.

① [3.7.1 b]: Segregation can be within an existing pen, paddock, or a designated hospital pen.

3.7.2 Segregation of sick or injured cows within the existing pen, or in a designated hospital pen must:

- a. provide bedding;
- b. protect their thermal comfort (this may require the use of shelter, additional bedding, or ventilation fans, as necessary);
- c. provide air quality that meets the requirements of Section 8.8;
- d. provide solid flooring (no slats);
- e. allow the animal to freely access feed and water, or if the animal is not capable of accessing feed and water independently then, they must be kept hydrated by offering water and feed throughout the day; and
- f. be cleaned daily.

• • • • • •

① [3.7.2 a]: It is recommended that segregation or hospital pens do not result in visual isolation from the rest of the herd.

① [3.7.2 b]: See also [Standard 3.7.3](#) for space requirements for sick or injured cows.

3.7.3 Each sick or injured animal within an existing pen, or designated hospital pen must be provided with the following space requirements per animal:

Age Category	Holstein or Similarly Sized Cattle	Jersey or Similarly Sized Cattle
Cow	120 ft ² (11 m ²)	96 ft ² (9 m ²)
Heifer (>8 months of age to calving)	60 ft ² (5.6 m ²)	48 ft ² (4.5 m ²)
Calf (<4 months old)	30 ft ² (2.8 m ²)	24 ft ² (2.2 m ²)
Calf (4-8 months old)	45 ft ² (4.2 m ²)	36 ft ² (3.3 m ²)
Young Bull (<2 years old)	120 ft ² (11.0 m ²)	96 ft ² (9.0 m ²)
Bull	144 ft ² (13.0 m ²)	115 ft ² (10.7 m ²)

• • • • • •

① [3.7.3]: The above space requirements do not apply to Step 1 operations utilizing a tie-stall barn if the cow can be treated in her stall and poses no health risk to the rest of the herd.

3.7.4 Segregated sick or injured animals must be monitored at least twice daily. • • • • • •

① [3.7.4]: Hospital pens should be used for sick animals only, and not for calving or for cows that have recently calved unless they are sick.

STANDARD	Step Level					
	1	2	3	4	5	5+

3.7 Hospital Pens Continued

3.7.5	Sick or injured lactating cows must be milked at least twice daily.	•	•	•	•	•	•
<p>① [3.7.5]: Sick or injured lactating cows could be milked in the hospital pen if moving them to the parlor would compromise their welfare.</p>							
3.7.6	Sick and/or injured animals must not be shipped off-farm as an alternative to treatment. Animals must be treated and have recovered prior to shipping off-farm, or if recovery does not seem likely, then the animal must be euthanized per Section 3.9 .	•	•	•	•	•	•
<p>① [3.7.6]: This standard excludes animals transported to a veterinarian for treatment or to a facility for specialized care.</p>							
<p>3.8 Non-Ambulatory/Downer Animals</p>							
<p>① The following requirements apply to all age categories on a dairy farm. Non-ambulatory/downer animals are mostly associated with the milking herd; however, there are occasions after long and difficult births where calves may be weak and unable to walk. Non-ambulatory and downer animals are often used interchangeably but are different. Non-ambulatory cows are often become downer cows - they can stand but can't walk. Downer animals cannot stand or walk.</p>							
3.8.1	Moving a non-ambulatory/downer animal must not exacerbate or cause additional pain or injury.	•	•	•	•	•	•
3.8.2	All non-ambulatory/downer animals must be assessed and then treated or euthanized.	•	•	•	•	•	•
<p>① [3.8.2]: See Section 3.9 for acceptable euthanasia methods.</p>							
3.8.3	<p>To help lift non-ambulatory/downer animals, only the following aids are allowed for use: slings, harnesses, wheelbarrows (for calves only), nets, pelvic lifts, 'Upsi Daisy' cow lifters, inflatable cushions specifically designed to support the underside of the animal, and dairy float tanks.</p> <p>① [3.8.3 a]: Water temperature used in dairy float tanks must be maintained between 86-100°F (30-38°C), and cows should be kept in water for no more than 12 hours per use.</p> <p>① [3.8.3 b]: For operations wishing to use a lifting aid that is not listed above, must contact G.A.P. and receive written approval prior to on-farm use.</p> <p>① [3.8.3 c]: Operations are permitted to borrow or share equipment to help lift non-ambulatory animals. Owning their own specialized equipment is not required if the operation has access to equipment.</p>	•	•	•	•	•	•
3.8.4	<p>Hip clamps can only be used on cows who become non-ambulatory in stalls, under the following conditions:</p> <ol style="list-style-type: none"> no other lifting aid can assist a cow to stand in the stall in a humane way; the hip clamps are used carefully for no longer than 5 minutes, so that no additional stress is caused to the cow; once the cow is standing, her hips are never positioned higher than her head; and hip clamps are only used to position the cow in a standing position or to move the cow onto a conveyance. 	•	•	•	•	•	•
3.8.5	Using chains or tractor pallet forks to move, lift or drag animals is prohibited.	•	•	•	•	•	•

STANDARD	Step Level					
	1	2	3	4	5	5+
3.8 Non-Ambulatory/Downer Animals <i>Continued</i>						
3.8.6	<p>If a bucket loader or skid-steer is required to move a non-ambulatory/downer animal:</p> <ul style="list-style-type: none"> a. there must be at least two people in addition to the driver to assist with loading and to monitor either side of the animal when it is being moved; b. the bucket must be padded so that the cow is not injured being moved into the bucket; c. the animal must be able to fit completely in the bucket so there is no chance of the animal falling out; d. the animal cannot be scooped into the bucket, but must instead be slid into the bucket; e. the animal must be secured prior to moving the loader or skid-steer; f. the operator of the loader or skid-steer must drive at a human-walking pace to the location where the animal will be relocated to; and g. the animal must not be dumped out of the bucket, but must be slowly, and carefully lowered onto a bedded area before being slid out of the bucket. 					
3.8.7	<p>All non-ambulatory/downer animals must be provided with specialized care and must be protected from other ambulatory cattle.</p> <p>① [3.8.7 a]: <i>Non-ambulatory/downer animals should be shifted/rolled from one side to the other every 4-6 hours to provide relief to the cows' limbs.</i></p> <p>① [3.8.7 b]: <i>Specialized care could include movement to a hospital pen. See Section 3.7.</i></p>					
3.8.8	<p>Operations must determine, with the help of veterinarians and/or advisors, if necessary, the factors that caused the cow to become non-ambulatory, and formulate a written plan to reduce re-occurrence within the herd.</p> <p>① [3.8.8]: <i>Identification of the cause(s) will aid in determining the best course of managing the downed cow as well as potentially mitigating future occurrence in the herd.</i></p>					
3.9 Euthanasia						
3.9.1	<p>All on-farm euthanasia must be performed by a veterinarian or other trained person(s).</p> <p>① [3.9.1]: <i>Producers will not be required to demonstrate the ability to euthanize an animal to show compliance with this standard, but they must be able to describe how they would perform euthanasia.</i></p>					
3.9.2 ^M	<p>Euthanasia technique(s) must cause rapid insensibility and be immediately followed by death.</p> <p>① [3.9.2]: <i>The operation must be able to articulate to the auditor the visual indicators of death, and the physical parameters that confirm this.</i></p>					
3.9.3	<p>If it is necessary to relocate a non-ambulatory animal to conduct euthanasia, an animal may be moved onto a conveyance such as a tarp, sled, or cart and that conveyance may be dragged or moved.</p> <p>① [3.9.3]: <i>See related Sections 3.8 on Non-Ambulatory/Downer Animals and Section 4.3 on Handling.</i></p>					
3.9.4	<p>The person performing euthanasia must remain with the animal(s) until death is confirmed.</p>					
3.9.5 ^M	<p>If an animal needs to be euthanized, this must be carried out as soon as possible, and at most, within 4 hours of discovery of the animal and/or making the decision to euthanize.</p>					
3.9.6	<p>Euthanasia equipment must be maintained, cleaned, and stored according to manufacturer's specifications.</p>					

STANDARD		Step Level					
		1	2	3	4	5	5+
3.9 Euthanasia <i>Continued</i>							
3.9.7	All euthanized/dead animals must be removed from housing and/or outdoor areas the day that they are euthanized/found.	•	•	•	•	•	•
	① [3.9.7]: <i>It is the responsibility of the operation to dispose of dead animals according to local, state, provincial, territorial, and/or federal or national regulations. Removal can include burial or composting in a designated area.</i>						
For animals under 24 weeks of age							
3.9.8 ^M	On-farm euthanasia of healthy male or female calves is prohibited.	•	•	•	•	•	•
	① [3.9.8]: <i>This standard excludes euthanasia that may be required because of a disease outbreak or health pandemic.</i>						
3.9.9	All animals under 24 weeks of age that need to be euthanized, must only be euthanized using one of the following methods listed below. Animals must be appropriately restrained as necessary to ensure the euthanasia method can be properly and safely administered: <ul style="list-style-type: none"> a. Purpose built, non-penetrating captive bolt to render the animal insensible, that is followed by a secondary method to ensure death (such as exsanguination); or b. Shot to the head with a firearm per AVMA Guidelines (see info note 3.9.9 a below for link); c. Penetrating captive bolt in accordance with the manufacturer’s specifications. Captive bolt use must also be followed by a secondary method to ensure death (such as exsanguination or pithing); or d. Barbiturates or barbituric acid derivatives administered by a veterinarian or by personnel who are registered/permitted to administer according to local, state, provincial, territorial and/or federal or national regulations (e.g., personnel registered with the US Drug Enforcement Administration). 	•	•	•	•	•	•
	① [3.9.9 a]: <i>AVMA Guidelines for the Euthanasia of Farm Animals: 2020 edition (https://www.avma.org/sites/default/files/2020-01/2020-Euthanasia-Final-1-17-20.pdf).</i> ① [3.9.9 b]: <i>Human safety is of primary importance and caretakers should always have the appropriate safety equipment.</i>						

STANDARD		Step Level					
		1	2	3	4	5	5+
3.9 Euthanasia <i>Continued</i>							
All animals 24 weeks of age and older							
3.9.10	All animals 24 weeks of age and older that need to be euthanized, must only be euthanized using one of the following methods listed below. Animals must be appropriately restrained as necessary to ensure the euthanasia method can be properly and safely administered: <ul style="list-style-type: none"> a. Shot to the head with a firearm per AVMA Guidelines (see info note [3.9.10 a] below for link); b. Penetrating captive bolt in accordance with the manufacturer’s specifications. Captive bolt use must also be followed by a secondary method to ensure death (such as exsanguination or pithing); or c. Barbiturates or barbituric acid derivatives administered by a veterinarian or by personnel who are registered/ permitted to administer according to local, state, provincial, territorial and/or federal or national regulations (e.g., personnel registered with the US Drug Enforcement Administration). 						
	<p>① [3.9.10 a]: AVMA Guidelines for the Euthanasia of Farm Animals: 2020 edition (https://www.avma.org/sites/default/files/2020-01/2020-Euthanasia-Final-1-17-20.pdf).</p> <p>① [3.9.10 b]: Human safety is of primary importance and caretakers should always have the appropriate safety equipment.</p>						
3.10 Mortality and Culling							
<p>① There are several ways in which mortality can be calculated on-farm; however, the required process for determination of compliance to the G.A.P. standard is found in Appendix IV.</p> <p>① Mortality is defined as any animal that dies (either of known or unknown causes) or is found dead on-farm but excludes stillborn calves. The calculation for calf mortality <u>must</u> include perinatal death.</p> <p>① A stillborn calf is defined as any calf born dead due to a difficult calving (dystocia) (assisted or unassisted).</p> <p>① Perinatal death is defined as calves born alive without dystocia but dies within 48 hours of birth.</p> <p>① Culls are defined as: (i) any animal(s) that have been euthanized, and/or (ii) removed from the herd and shipped off-farm (either to slaughter or to another farm).</p> <p>① Mortality will be assessed by a review of records.</p>							
3.10.1	Records of mortality and culling by animal group (e.g., pre-weaned calves, heifers, cows, etc.) and the reason, if known, must be kept.						
	① [3.10.1]: Operations must distinguish between culls and mortality.						
3.10.2	If mortality exceeds the percentages listed in standards 3.10.3-3.10.7, a written intervention plan, as detailed in Appendix III , that addresses, at a minimum, identification of the major cause(s) of mortality and actions taken to correct the occurrence must be implemented immediately to reduce incidence levels.						

STANDARD	Step Level
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		1	2	3	4	5	5+
3.10 Mortality and Culling Continued							
Unweaned Calves							
① See Appendix IV for sample calculation.							
3.10.3 M	Pre-weaning mortality must not exceed 6% per 12-month period.	•	•	•			
	① [3.10.3 a]: This percentage excludes stillborn calves, calves that have been euthanized, and calves that have been shipped off-farm but includes perinatal deaths.						
	① [3.10.3 b]: For small operations of 100 milking cows or less, the tolerance is six (6) calves. ① [3.10.3 c]: Auditors will evaluate this standard by calculating an annual percentage using the month the audit occurs in as the reference point. For example, if the operation is audited in May 2021, the auditor will calculate pre-weaning mortality between April 2020 and April 2021.						
3.10.4	Pre-weaning mortality must not exceed 4% per 12-month period.				•	•	•
	① [3.10.4 a]: This percentage excludes stillborn calves and culls but includes perinatal deaths.						
	① [3.10.4 b]: For small operations of 100 milking cows or less, the threshold for this standard is four (4) calves. ① [3.10.4 c]: Auditors will evaluate this standard by calculating an annual percentage using the month the audit occurs in as the reference point. For example, if the operation is audited in May 2021, the auditor will calculate pre-weaning mortality between April 2020 and April 2021.						
Weaned Heifer to 3-weeks Pre-Calving							
① See Appendix IV for sample calculation.							
3.10.5 M	Mortality for weaned heifers to 3-weeks pre-calving must not exceed 2% per 12-month period.	•	•	•	•	•	•
	① [3.10.5 a]: This percentage excludes culls.						
	① [3.10.5 b]: For small operations of 100 milking cows or less, the tolerance is two (2) heifers. ① [3.10.5 c]: Auditors will evaluate this standard by calculating an annual percentage using the month the audit occurs in as the reference point. For example, if the operation is audited in May 2021, the auditor will calculate mortality between April 2020 and April 2021.						
Heifers from 3-weeks Pre-Calving and Cows							
① See Appendix IV for sample calculation.							
3.10.6 M	Mortality of heifers from 3-weeks pre-calving and cows must not exceed 4% per 12-month period.	•	•	•			
	① [3.10.6 a]: This percentage excludes culls.						
	① [3.10.6 b]: For small operations of 100 milking cows or less, the tolerance is four (4) animals. ① [3.10.6 c]: Auditors will evaluate this standard by calculating an annual percentage using the month the audit occurs in as the reference point. For example, if the operation is audited in May 2021, the auditor will calculate mortality between April 2020 and April 2021.						
3.10.7	Mortality of heifers from 3-weeks pre-calving and cows must not exceed 2% per 12-month period.				•	•	•
	① [3.10.7 a]: This percentage excludes culls.						
	① [3.10.7 b]: For small operations of 100 milking cows or less, the tolerance is two (2) animals. ① [3.10.7 c]: Auditors will evaluate this standard by calculating an annual percentage using the month the audit occurs in as the reference point. For example, if the operation is audited in May 2021, the auditor will calculate mortality between April 2020 and April 2021.						

4 ANIMAL CARE AND MANAGEMENT

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STANDARD		Step Level					
		1	2	3	4	5	5+
4.1 Daily Herd Management							
4.1.1	All unweaned calves, lactating cows and close-up dry cows must be observed and monitored at least twice daily. Records of any health or welfare issues that occur must be kept.	•	•	•	•	•	•
	① [4.1.1]: <i>Observation and monitoring can include observation in milking parlors, during feeding and scraping out.</i>						
4.1.2	Weaned calves, heifers, and far-off dry cows must be observed and monitored at least once daily. Records of any health or welfare issues that occur must be kept.	•	•	•	•	•	•
	① [4.1.2]: <i>Observation and monitoring can include observation during feeding and scraping out.</i>						
4.2 Training							
① <i>Most dairies employ/contract additional personnel in addition to family members to assist with all aspects of dairy farming. It is important that anyone with responsibilities that include animal care and management be fully trained in all aspects of their duties. Training can take many forms, but it is important that it is provided in a language understood by the employee responsible for the task.</i>							
① <i>Service professionals such as veterinarians, certified hoof trimmers, breeding technicians, and/or nutritionists are not included in this requirement.</i>							
① <i>Keeping records of trainings is important because it adds accountability to ensuring expectations around animal care and management are met.</i>							
4.2.1	Each operation must provide training to all dairy cattle caregivers and/or managers that: <ul style="list-style-type: none"> a. is written and/or hands-on; b. is presented in all necessary languages; c. includes instruction on recognizing signs of normal and abnormal cow, calf, and heifer behavior; d. describes all aspects of the individual’s responsibilities; e. describes emergency procedures; f. is provided prior to the individual’s handling of any animals on the operation; g. covers all requirements of this version of G.A.P.’s 5-Step® Animal Welfare Pilot Standards for Dairy Cattle for employees with animal care and milking responsibilities; and h. is on-going as necessary and, at a minimum, when any changes affecting the care and management of dairy cattle are implemented OR annually if no changes have been implemented. 	•	•	•	•	•	•
	① [4.2.2 a]: <i>Training includes initial, re-training and on-going training.</i>						
4.2.2	Each operation must keep a record of caregiver’s training (whether full-time or part-time), including dates of training and topics covered. Records must be signed by both the attendee of the training and the administrator of the training.	•	•	•	•	•	•
	① [4.2.2 b]: <i>This record-keeping standard applies to all caregivers but does not include immediate family members.</i>						

STANDARD	Step Level
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		1	2	3	4	5	5+
4.3 Handling							
4.3.1	The operation must have a written zero-tolerance policy for willful acts of abuse and/or egregious acts towards all animals on-farm.	•	•	•	•	•	•
4.3.2 C	Willful acts of abuse and/or egregious acts towards all animals on-farm are prohibited. Examples of these behaviors include, but are not limited to dragging animals, intentionally applying prods to sensitive parts, deliberate slamming of gates on animals, malicious driving of ambulatory animals, and hitting, beating, throwing, punching, or kicking an animal.	•	•	•	•	•	•
	① [4.3.2]: Examples above from: NAMI's Recommended Animal Handling Guidelines & Audit Guide, September 2019, rev. 2.						
4.3.3	All animals must be handled calmly, quietly, and given time to move.	•	•	•	•	•	•
4.3.4	Low stress handling aids must be used correctly.	•	•	•	•	•	•
	① [4.3.4 a]: Examples of handling aids include using point of balance (flight zone) or nylon flags, rattle/shaker paddles. ① [4.3.4 b]: Examples of handling aids being used incorrectly include poking animals in sensitive areas such as the eyes, nose, rectum, genitals or udder, as well as hitting animals with the handling aids.						
4.3.5 H	The use of electric prods on calves 6-months of age or younger and on non-ambulatory animals is prohibited.	•	•	•	•	•	•
4.3.6	Electric prods must never be carried during routine handling and must only be used as a tool of last resort when human or animal safety is at risk. If use is necessary:	•	•	•	•	•	•
	<ul style="list-style-type: none"> a. prods must not have a voltage that produces a vocal response from the animal; b. prods must only be used on the hindquarters of the animal; and c. animals must be given a chance to respond to the prod before being re-applied. 						
	① [4.3.6 a) Hindquarter excludes the anus, testes, vulva, and udder. ① [4.3.6 b) This includes external people to the operation (e.g., hoof trimmers, veterinarians, breeding technicians)						
4.3.7	For treatments and/or routine procedures where chutes, headlocks, tilt tables or other restraint methods are used, animals must not be restrained for longer than the time necessary to complete the procedure.	•	•	•	•	•	•
4.3.8	Squeeze chutes/cattle crushes must be operated in a manner that does not cause injury.	•	•	•	•	•	•
4.3.9	Hind-leg hobbles may only be used to help stabilize cows that have previously sustained an injury so that secondary injuries are reduced. They must not be used to restrain the animal, for example, from kicking.	•	•	•	•	•	•
4.3.10 M	Electro-immobilization is prohibited.	•	•	•	•	•	•
4.3.11	If stock dogs are used to move cows, they must be trained and under control at all times.	•	•	•	•	•	•
	① [4.3.11]: Control includes voice, hand, and whistle cues.						
4.4 Identification							
4.4.1	All animals must be individually identified with uniquely numbered ear tags, radio frequency identification (RFID), and/or electronic identification (EID).	•	•	•	•	•	•
STANDARD		Step Level					

		1	2	3	4	5	5+
4.4.2	Calves and any purchased heifers or cows must be uniquely identified within the first 72 hours.	•	•	•	•	•	•
4.4.3	Ear notching for identification purposes is prohibited.	•	•	•	•	•	•
	① [4.4.3]: Tissue samples collected for BVD, or genetics testing is allowed.						
4.4.4	Hot iron and freeze branding are prohibited.	•	•	•	•	•	•
	①[4.4.4]: Animals with pre-existing brands at initial audit, or bought in, can be included in the G.A.P. program - their identification will be recorded and kept on file by the Certifier.						
4.5 Assisted Calving							
4.5.1	The number of assisted calvings and caesarean sections (combined) must not exceed 8% per 12-month period. Records must be kept.	•	•	•	•	•	•
	① [4.5.1 a]: Assisted calving is defined as where a cow or calf's welfare is compromised during calving and human intervention is required to assist the calving process. This includes abnormal presentation, posture or position of the calf, cow or calf is showing signs of stress or fatigue (e.g., calf has swollen tongue, yellow staining of the calf, severe rectal bleeding from the cow), water sac has been visible for 2 hours with no progress, cow has been trying for 30+ minutes with no progress, and caesarean sections.						
	① [4.5.1 b]: Auditors will evaluate this standard by calculating an annual percentage using the month the audit occurs in as the reference point. For example, if the operation is audited in July 2020, the auditor will calculate the number of assisted calvings and caesarean sections that occurred between June 2019 and June 2020.						
4.5.2	Caesarean sections must be performed by a veterinarian using analgesia, local anesthetic, and post-operative pain therapy.	•	•	•	•	•	•
	① [4.5.2]: Details of treatment should be recorded in accordance with Standard 3.2.4.						
4.6 Calf Care, Colostrum and Weaning							
① This section <u>applies to all calves, whether male or female</u> , whether intended for sale or retention in the herd.							
① Colostrum is essential to a good start for dairy calves. The antibodies and immunoglobulins found in colostrum provide the calf's first defense against illness and disease until its own immune system develops.							
① Please see Section 6: Feed & Water for standards on milk, milk replacer, feed, and water.							
① Weaning is defined as the cessation of feeding/receiving milk or milk replacer to the calf.							
Umbilical Cord Care							
4.6.1	An umbilical cord dip solution must be used at least once within 12-hours of birth.	•	•	•	•	•	•

STANDARD		Step Level						
		1	2	3	4	5	5+	
4.6 Calf Care, Colostrum and Weaning <i>Continued</i>								
Colostrum								
4.6.2	Operations must test the quality of colostrum of each cow providing colostrum. If colostrum quality is less than 50 mg/ml of immunoglobulin G (IgG) then the calf must receive alternative high-quality colostrum.	•	•	•	•	•	•	
	ⓘ [4.6.2 a]: <i>Colostrometers or refractometers (i.e., Brix meters) can be used on-farm to measure colostrum quality.</i> ⓘ [4.6.2 b]: <i>Colostrum that measures >22% with a refractometer or measures ‘green’ in a colostrometer is considered high-quality.</i> ⓘ [4.6.2 c]: <i>Alternative high-quality colostrum includes commercially available colostrum replacer/supplement.</i>							
4.6.3 ⓘ	Calves must receive at least four quarts (4 L) of colostrum (for Holstein and other similarly sized animals) within 6 hours of birth. Jersey calves and other similarly sized animals must receive at least three quarts (3 L) of high-quality colostrum within 6 hours of birth.	•	•	•	•	•	•	
	ⓘ [4.6.3 a]: <i>Any calves born over night when caregivers are not present must receive colostrum within the first hour that caregivers are on site.</i> ⓘ [4.6.3 b]: <i>See Standard 4.6.2 for colostrum quality requirements.</i> ⓘ [4.6.3 c]: <i>This standard does not prohibit operations from leaving a calf at hoof to obtain colostrum directly from the dam (see Standard 4.6.6), if the colostrum meets the requirements of this standard</i>							
4.6.4	Calves must receive a secondary feeding of 2-3 quarts (2-3 L) of colostrum within 12-hours of the first feeding.		•	•	•	•	•	
	ⓘ [4.6.4]: <i>See Standard 4.6.2 for colostrum quality requirements</i>							
4.6.5	Colostrum must be received either directly from the dam OR from a bottle with a teat. Esophageal tube feeding must only be used as a last resort and by trained caregivers.	•	•	•	•	•	•	
	ⓘ [4.6.5]: <i>Where tube feeding needs to occur, operations should lubricate the tube in milk or colostrum to help the tube slide more easily.</i>							
Cow-Calf Separation								
4.6.6 ⓘ	Calves must have physical contact with their dams for a minimum of 6-hours after birth.	•						
	ⓘ [4.6.6 a]: <i>This ensures that the calf has a chance to nurse directly from the cow which aids in reducing the incidence of retained placenta in cows and provides the ability for social interaction between the cow and calf.</i> ⓘ [4.6.6 b]: <i>This standard does not prohibit an operation from removing a calf briefly from its dam to feed the calf colostrum.</i> ⓘ [4.6.6 c]: <i>This standard does not prohibit an operation from removing any fresh cows for milking, providing the requirements of the standard are met.</i>							
4.6.7	Calves must stay with their dams for a minimum of 12-hours after birth.		•	•	•			
	ⓘ [4.6.7 a]: <i>This standard does not prohibit an operation from removing a calf briefly from its dam to feed the calf colostrum.</i> ⓘ [4.6.7 b]: <i>This standard does not prohibit an operation from removing any fresh cows for milking, providing the requirements of the standard are met.</i>							

STANDARD	Step Level
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		1	2	3	4	5	5+
Cow-Calf Separation <i>Continued</i>							
4.6.8	Calves must stay with their dam until weaning OR be cross fostered onto a nurse cow until weaning.					•	•
	ⓘ [4.6.8 a]: This standard does not prohibit an operation from removing a calf briefly from its dam to feed the calf colostrum. ⓘ [4.6.8 b]: This standard does not prohibit an operation from removing any fresh cows for milking, providing the requirements of the standard are met.						
4.6.9	If nurse cows are used:						
	a. no more than 3 calves can be assigned to each nurse cow at a time; and b. the age range of the calves for each nurse cow must not be more than 1 week apart.	•	•	•	•	•	•
ⓘ [4.6.9]: See Standards 4.6.11 – 4.6.14 for weaning age.							
Weaning							
4.6.10	The date of weaning for each calf must be kept so that the requirements of this section can be reviewed by the auditor.	•	•	•	•	•	•
4.6.11	Calves must not be weaned until they are at least 56 days old.	•					
4.6.12	Calves must not be weaned until they are at least 84 days old.		•				
4.6.13	Calves must not be weaned until they are at least 112 days old.			•	•		
4.6.14	Calves must not be weaned until they are at least 168 days old.					•	•
	ⓘ [4.6.14]: For calves kept with their dams or nurse cows, this can be done by separating the cow and calf/calves for parts of the day.						
4.6.15 H	Milk or milk replacer must be withdrawn gradually over a period of 7 to 10 days prior to weaning calves.	•	•	•	•		
	ⓘ [4.6.15 a]: This permits operations to start the weaning process, for example, at 46 days of age for Step 1.						
	ⓘ [4.6.15 b]: Diluting milk or milk replacer with water is permitted during this process.						
4.6.16	Calves must be weaned from milk and separated from their dam or nurse cow using a low stress method either by:						
	a. separating the cow and calf/calves for increasing parts of the day; or b. two step weaning using nose flaps.					•	•
4.6.17	Calves must not be muzzled.	•	•	•	•	•	•
	ⓘ [4.6.17 a]: Sometimes calves are muzzled to prevent cross suckling, however, this practice is not allowed under this standard.						
	ⓘ [4.6.17 b]: Muzzles do not include calf nose flaps (also known as ‘calf weaners’ or ‘quiet weaners’) – a non-invasive weaning device that is inserted into the nostrils of a calf for a short period of time, and acts to restricts the calf’s ability to nurse.						

STANDARD	Step Level					
	1	2	3	4	5	5+
Transport of Young Calves ① See Section 11 on Transport						
4.6.18 Calves cannot be transported off the operation until they are at least 5 days old. ① [4.6.18 a]: If calves are disbudded prior to moving off-farm, the procedure must be performed at least 2 days prior to calves being transported so that they have had some time to recover from the procedure (see Section 4.7 on disbudding). ① [4.6.18 b]: This standard applies to both male calves sold off-farm for use in the veal industry, and heifer calves being moved off the home farm to specialized heifer rearing facilities. ① [4.6.18 c]: This standard excludes any calves needing to be transported off-farm for treatment by a veterinarian or being transported to a calf facility within an operation.	•					
4.6.19 Calves cannot be transported off the operation until they are at least 8 days old. ① [4.6.19 a]: If calves are disbudded prior to moving off-farm, the procedure must be performed at least 2 days prior to calves being transported so that they have had some time to recover from the procedure (see Section 4.7 on disbudding). ① [4.6.19 b]: This standard applies to both male calves sold off-farm for use in the veal industry, and heifer calves being moved off the home farm to specialized heifer rearing facilities. ① [4.6.19 c]: This standard excludes any calves needing to be transported off-farm for treatment by a veterinarian or being transported to a calf facility within an operation.		•				
4.6.20 Calves cannot be transported off the operation until they are at least 14 days old. ① [4.6.20a]: For Step 3 and 4 operations, if calves are disbudded prior to moving off-farm, the procedure must be performed at least 2 days prior to calves being transported so that they have had some time to recover from the procedure (see Section 4.7 on disbudding). ① [4.6.20 b]: This standard applies to both male calves sold off-farm for use in the veal industry, and heifer calves being moved off the home farm to specialized heifer rearing facilities (Steps 3 and 4). ① [4.6.20 c]: This standard excludes any calves needing to be transported off-farm for treatment by a veterinarian or being transported to a calf facility within an operation.			•	•	•	•
Beef						
4.6.21 Any calves that are intended for sale into the beef sector with the intent to be marketed as G.A.P. Certified must be kept with their dam and raised according to G.A.P.'s 5-Step® Animal Welfare Standards for Beef Cattle. ① [4.6.21 a]: See www.globalanimalpartnership.org/standards/beef for further information. ① [4.6.21 b]: This does not include calves intended for sale as veal - G.A.P. does not currently have standards for veal calves.	•	•	•	•	•	•

STANDARD	Step Level					
	1	2	3	4	5	5+
4.7 Disbudding						
① <i>Disbudding is the removal of horn buds prior to attaching to the skull of the calf.</i>						
① <i>It is well documented that disbudding is a painful procedure for calves. While this Standard requires the use of pain relief if disbudding is practiced, an alternative strategy is to utilize polled genetics (see Standards 1.2.4 and 1.2.5). It is understood that genetic quality is limited in existing polled genetics offerings; however, improvements will be made if demand increases.</i>						
4.7.1	<i>The date of disbudding for each calf must be kept so that the requirements of this Section can be reviewed.</i>					
4.7.2	Calves must be disbudded using methods and ages as described in the table below. Methods of disbudding are listed below, where YES indicates an acceptable method and NO indicates an unacceptable method. Calves must be appropriately restrained as necessary to ensure the disbudding method can be properly and safely administered.					
	Method	Acceptable for use?	Criteria			
	a. Hot iron	YES	On or before the calf reaches 30 days of age.			
	b. Caustic paste	YES	On or before the calf reaches 5 days of age. Care must be taken to ensure other animals do not come into contact with the paste, and/or the paste does not spread beyond the horn bud.			
	c. Knives	NO	n/a			
	d. Shears	NO	n/a			
	e. Dehorning spoons	NO	n/a			
	f. Dehorning cups	NO	n/a			
	g. Tubes	NO	n/a			
	h. Clove oil	NO*	n/a			
*Use of clove oil in any manner as a method for removing or restricting growth of horn buds is prohibited.						
① [4.7.2]: <i>If the operation wants to utilize a method that is not listed as acceptable in the table above, they must apply directly to G.A.P. for approval prior to use.</i>						

STANDARD		Step Level					
		1	2	3	4	5	5+
4.7 Disbudding <i>Continued</i>							
4.7.3	If the operation carries out disbudding, pain relief that includes the use of a local anesthetic and a nonsteroidal anti-inflammatory drug (NSAID) must be provided under the supervision of the herd's veterinarian, to alleviate pain during and after the procedure. Records must be kept.	•	•				
	<p>① [4.7.3 a]: A sedative can also be administered to calves prior to the procedure as a restraint mechanism. Sedation is not considered pain relief.</p> <p>① [4.7.3 b]: Calves that are sedated should not be placed into a head restraint.</p> <p>① [4.7.3 c]: Each operation's VCPR (see Section 3.1) details the pharmaceuticals, and scope of use, producers are permitted to use without a veterinarian present, and is considered 'under veterinarian supervision' for this standard.</p>						
4.7.4	If the operation carries out disbudding, pain relief that includes the use of a sedative as a restraint mechanism, local anesthetic, and a nonsteroidal anti-inflammatory drug (NSAID) must be provided under the supervision of the herd's veterinarian, to alleviate pain during and after the procedure. Records must be kept.			•	•		
	<p>① [4.7.4 a]: Calves that are sedated should not be placed into a head restraint.</p> <p>① [4.7.4 b]: Each operation's VCPR (see Section 3.1) details the pharmaceuticals, and scope of use, producers are permitted to use without a veterinarian present, and is considered 'under veterinarian supervision' for this standard.</p>						
4.7.5	Disbudding is prohibited.					•	•
	<p>① [4.7.5]: Disbudded animals on the operation at the time of the initial audit will not be excluded from the G.A.P. program. Disbudded animals will be recorded and kept on file by the Certifier.</p>						
4.7.6	Dehorning is prohibited.	•	•	•	•	•	•
	<p>① [4.7.6 a]: Dehorning is removal of horns that have already attached to the skull of animal. Due to the pain associated with this procedure, only removal of horn buds before they attach to the skull (disbudding) is permitted under the G.A.P. Program, if pain relief techniques (see Standards 4.7.3 and 4.7.4) are also provided.</p> <p>① [4.7.7 b]: For the purposes of this standard, de-horning is any removal of horn after 21 days of age.</p>						
4.7.7	Horn tipping is permitted if only the non-living horn material is removed.	•	•	•	•	•	•
4.8 Supernumerary Teats							
① The prevalence of supernumerary teats is variable, between breeds, and even between individuals of the same breed but evidence suggests genetic heritability is involved.							
4.8.1	If the operation removes supernumerary teats, pain relief that includes the use of a local anesthetic and a nonsteroidal anti-inflammatory drug (NSAID) must be provided under the supervision of the herd's veterinarian to alleviate pain during and after the procedure. Animals must be appropriately restrained as necessary to ensure the teat removal method can be properly and safely administered. Records must be kept.	•	•	•	•		
	<p>① [4.8.1]: Supernumerary teats can be functional or non-functional and are typically removed to reduce possible problems with milking and udder health.</p>						

STANDARD		Step Level																				
		1	2	3	4	5	5+															
4.8 Supernumerary Teats <i>Continued</i>																						
4.8.2	Removal of supernumerary teats is prohibited.					•	•															
4.9 Castration of Male Calves Kept On-Farm																						
① <i>It is understood that most male calves from the dairy industry are not castrated. This section of the standard exists for any operation that wishes to retain male calves and castrate them.</i>																						
4.9.1	The date of castration for each calf must be kept so that the requirements of this Section can be reviewed.	•	•	•	•																	
4.9.2	Calves must be castrated using methods and ages described in the table below. Methods of castration are listed below, where YES indicates an acceptable method and NO indicates an unacceptable method. Calves must be appropriately restrained as necessary to ensure the castration method can be properly and safely administered.																					
	<table border="1"> <thead> <tr> <th>Method</th> <th>Acceptable</th> <th>Criteria</th> </tr> </thead> <tbody> <tr> <td>a. bloodless clamp / emasculator</td> <td>YES</td> <td>On or before the calf reaches 42 days of age</td> </tr> <tr> <td>b. scalpel / surgically sharp knife</td> <td>YES</td> <td>On or before the calf reaches 42 days of age</td> </tr> <tr> <td>c. rings</td> <td>YES</td> <td>On or before the calf reaches 7 days of age</td> </tr> <tr> <td>d. bands</td> <td>NO</td> <td>n/a</td> </tr> </tbody> </table>	Method	Acceptable	Criteria	a. bloodless clamp / emasculator	YES	On or before the calf reaches 42 days of age	b. scalpel / surgically sharp knife	YES	On or before the calf reaches 42 days of age	c. rings	YES	On or before the calf reaches 7 days of age	d. bands	NO	n/a	•	•	•	•	•	•
	Method	Acceptable	Criteria																			
	a. bloodless clamp / emasculator	YES	On or before the calf reaches 42 days of age																			
	b. scalpel / surgically sharp knife	YES	On or before the calf reaches 42 days of age																			
c. rings	YES	On or before the calf reaches 7 days of age																				
d. bands	NO	n/a																				
① [4.9.2]: <i>If the operation wants to utilize a method that is not listed as acceptable in the table above, they must apply directly to G.A.P. for approval prior to use.</i>																						
4.9.3	If the operation carries out castration, pain relief that includes the use of a local anesthetic and a nonsteroidal anti-inflammatory drug (NSAID) must be provided under the supervision of the herd's veterinarian to alleviate pain during and after the procedure. Records must be kept.	•	•																			
	① [4.9.3 a]: <i>A sedative can also be administered to calves prior to the procedure as a restraint mechanism. Sedation is not considered pain relief.</i>																					
	① [4.9.3 b]: <i>Calves that are sedated should not be placed into a head restraint.</i> ① [4.9.3 c]: <i>Each operation's VCPR (see Section 3.1) details the pharmaceuticals, and scope of use, producers are permitted to use without a veterinarian present, and is considered 'under veterinarian supervision' for this standard.</i>																					
4.9.4	If the operation carries out castration, pain relief that includes the use of a sedative, local anesthetic, and a nonsteroidal anti-inflammatory drug (NSAID) must be provided under the supervision of the herd's veterinarian to alleviate pain during and after the procedure. Records must be kept.			•	•	•	•															
	① [4.9.4 a]: <i>Calves that are sedated should not be placed into a head restraint.</i>																					
	① [4.9.4 b]: <i>Each operation's VCPR (see Section 3.1) details the pharmaceuticals, and scope of use, producers are permitted to use without a veterinarian present, and is considered 'under veterinarian supervision' for this standard.</i>																					

STANDARD		Step Level					
		1	2	3	4	5	5+
4.10 Tail Care & Management							
4.10.1	Tools used for switch trimming must be in good working order with well oiled, sharp blades. ① [4.10.1]: Tail switches can be trimmed using hand shears, scissors, or electric trimmers.	•	•	•	•	•	•
4.10.2 M	Tail docking is prohibited.	•	•	•	•	•	•
4.10.3 M	Tail ties are permitted as long as they meet the following criteria: a. the tie is made of elasticized cording; b. the length of the tie allows the tail to hang so that the tail is no more than 6 inches (15 cm) away from the gutter; c. tail ties are only used on cows; and d. the tie must have a safety release. ① [4.10.3 a]: Tail ties are elastic strings put around tail bristles and tied to a line that is then suspended from the ceiling in tie-stall operations. They do not restrict movement. ① [4.10.3 b]: This standard only applies to Step 1 tie stall operations.	•					
4.11 Hoof Care							
4.11.1	Hooves must be inspected at least twice annually and trimmed as required by a professional hoof trimmer or trained and experienced caretaker. Dates of trimmings and the total number of cows that were trimmed at each event must be kept. ① [4.11.1 a]: It is recommended that one of the trimming events is in early to mid-lactation. ① [4.11.1 b]: This standard excludes heifers and calves.	•	•	•			
4.11.2	Hooves must be inspected at least once annually and trimmed as required by a professional hoof trimmer. Dates of trimmings and the total number of cows that were trimmed at each event must be kept. ① [4.11.2]: Dairy cows on pasture typically do not require their hooves to be trimmed as often as dairy cows kept in zero-grazing systems.				•	•	•
4.12 Other Commercial Animals on the Operation							
4.12.1	All species of animals raised on the operation for which 5-Step® Animal Welfare Standards exist must be raised and handled according to Step 1 standards or higher. ① [4.12.1]: Animals kept as pets, show animals or other non-commercial situations are excluded from this standard.					•	•

STANDARD		Step Level					
		1	2	3	4	5	5+
4.13 Domestic Animals on the Operation							
4.13.1	Neglect or abuse of domestic animals is prohibited.	•	•	•	•	•	•
4.13.2	All domestic animals on-farm must be provided: <ul style="list-style-type: none"> a. food and water daily, as evidenced by healthy body score condition; b. surroundings that do not cause them injury; c. an environment that allows for freedom of movement and exercise; d. a comfortable resting area that provides protection from temperature extremes; and e. veterinary attention, if required. 	•	•	•	•	•	•
<i>① [4.13.2]: Domestic animals include dogs, cats, horses, goats, chickens, or any other animals on the operation, including both pets and working animals.</i>							

5 ANIMAL-BASED OUTCOME MEASURES AND REPORTING

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① Throughout the standard, reference is given to the utilization of the various scoring systems found in the Appendices to assess compliance to a standard. These scoring systems are referred to as ‘animal-based outcome measures’ because they use the animal as a gauge to assess the impact of management and the environment on their welfare.

This section of the standard addresses acceptable thresholds for each of the scoring systems. In some instances, the threshold applies to all Steps within the program, whereas, in others, the threshold has been adjusted to reflect the system and Step level. In all cases, the thresholds take into consideration both severity and incidence.


Scoring tools listed in the appendix must be used:

- to identify animals that are sick, injured and otherwise unfit. As part of the recording keeping requirement in [Standard 3.2.3](#), operations must score the animal within their treatment, illness and/or injury monitoring records;
- when conducting mid-cycle live animal assessments of calves, heifers, and dry cows per [Section 5.7](#); and
- when conducting live animal assessments of cows bimonthly per [Section 5.8](#).










Thresholds will be used to assess operations during the on-farm audit as well as during records review.

STANDARD		Step Level					
		1	2	3	4	5	5+
5.1 Body Condition Scoring (BCS)							
① See Appendix I for BCS scoring tool for (i) cows and (ii) calves & heifers.							
5.1.1 	All animals must display an overall BCS of at least 2 on a 5-point scale for cows and 4-point scale for calves and heifers.	•	•	•	•	•	•
5.1.2	Animals with a BCS of less than 2 must have a feeding plan in place bring them back into condition (BCS >2) or be euthanized according to Section 3.9 . Records must be kept. ① [5.1.2]: See Standard 3.2.5 for details on animals not responding to treatment.	•	•	•	•	•	•
5.2 Lameness							
① See Appendix II for Lameness Score.							
5.2.1 	Each operation must manage lameness score 3 (severely lame) so that levels do not exceed 2% at any one time for each of the following: a. milking herd; and b. dry cow herd. ① [5.2.1]: For small operations of 100 milking cows or fewer the tolerance is two (2) animals.	•	•	•			

STANDARD		Step Level					
		1	2	3	4	5	5+
5.2 Lameness <i>Continued</i>							
5.2.2	Each operation must manage lameness score 3 (severely lame) so that levels do not exceed 1% at any one time for each of the following: a. milking herd; and b. dry cow herd.				•	•	•
	① [5.2.2]: For small operations of 100 milking cows or fewer, the tolerance is one (1) animal.						
5.2.3 M	Each operation must manage lameness score 2 (moderately lame) so that levels do not exceed 10% at any one time for each of the following: a. milking herd; and b. dry cow herd.	•	•	•			
5.2.4	Each operation must manage lameness score 2 (moderately lame) so that levels do not exceed 5% at any one time for each of the following: a. milking herd; and b. dry cow herd.				•	•	•
	① [5.2.4]: For small operations of 100 milking cows or fewer, the tolerance is five (5) animals.						
5.3 Lesions and Hair Loss							
① See Appendix VIII for Lesions and Hair Loss Score.							
5.3.1 M	The percentage of animals that score 2 for lesions and/or hair loss, must not exceed 5% at any one time for each of the following: a. heifers (weaned calves to first calving); b. dry cows; and c. milking herd.	•	•	•			
	① [5.3.1]: For small operations of 100 milking cows or fewer, the tolerance is five (5) animals.						
5.3.2	The percentage of animals that score 2 for lesions and/or hair loss, must not exceed 1% at any one time for each of the following: a. heifers (weaned calves to first calving); b. dry cows; and c. milking herd.				•	•	•
	① [5.3.2]: For small operations of 100 milking cows or fewer, the tolerance is one (1) animal.						

STANDARD		Step Level					
		1	2	3	4	5	5+
5.4 Swellings							
① See Appendix XIV for Swellings Score.							
5.4.1 	The percentage of animals that score 2 for swellings, must not exceed 5% at any one time for each of the following: a. heifers (weaned calves to first calving); b. dry cows; and c. milking herd.	•	•	•			
	① [5.4.1]: For small operations of 100 milking cows or fewer, the tolerance is five (5) animals.						
5.4.2	The percentage of animals that score 2 for swellings, must not exceed 1% at any one time for each of the following: a. heifers (weaned calves to first calving); b. dry cows; and c. milking herd.				•	•	•
	① [5.4.2]: For small operations of 100 milking cows or fewer, the tolerance is one (1) animal.						
5.5 Cleanliness							
① See Appendix VII for Cleanliness Score.							
5.5.1	The percentage of animals that score 2 (dirty) for cleanliness, must not exceed 3% at any one time for each of the following: a. unweaned calves; b. heifers (weaned calves to first calving); c. dry cows; and d. milking herd.	•	•	•	•	•	•
	① [5.5.1]: For small operations of 100 milking cows or fewer, the tolerance is three (3) animals.						
5.5.2	The percentage of animals that score 3 (very dirty) for cleanliness, must not exceed 1% at any one time for each of the following: a. unweaned calves; b. heifers (weaned calves to first calving); c. dry cows; and d. milking herd.	•	•	•	•	•	•
	① [5.5.2]: For small operations of 100 milking cows or fewer, the tolerance is one (1) animal.						

STANDARD		Step Level					
		1	2	3	4	5	5+
5.6 Broken Tails							
5.6.1	Operations must not have more than 1% of the milking and dry cow herd showing evidence of broken tails at any given time.	•	•	•	•	•	•
	ⓘ [5.6.1 a]: Broken tails include tails that are bent, misshapen, short, or injured. ⓘ [5.6.1 b]: Cows with broken tails will be inventoried at the time of the audit so that they are not double counted at recertification. ⓘ [5.6.1 c]: For small operations of 100 milking cows or fewer, the tolerance is one (1) animal.						
5.7 Calf, Heifer and Dry Cow Animal Assessments and Reporting							
ⓘ G.A.P. will utilize the data collected to provide benchmarking assessments, analysis so that compliance can be adjusted accordingly, and publicly report an anonymized summary of animal assessment data after one certification cycle has been completed.							
ⓘ Operations are strongly encouraged to utilize the HerdDogg application for smart phones and devices to complete and report G.A.P.'s Animal Assessments.							
Unweaned Calves (birth to weaning)							
5.7.1 ⓘ	Operations must conduct a Calf Comfort Assessment as outlined in Standard 5.7.2. This assessment must be conducted once mid-certification cycle, for all unweaned calves on site at that specific time. Completed assessments must be submitted to G.A.P. and to the Certifier.	•	•	•	•	•	•
	ⓘ [5.7.1 a]: The Certifier will communicate to each operation the date the assessment must be submitted by. ⓘ [5.7.1 b]: All unweaned calves onsite during the selected mid-certification cycle month must be evaluated as part of this assessment; however, all calves do not need to be assessed on the same day. The operation may assess by pen or group during the month the assessment is due. ⓘ [5.7.1 c]: Auditors will also conduct an animal assessment of all calves onsite at the time of the audit.						
5.7.2	Operations must assess unweaned calves for the following: <ol style="list-style-type: none"> Body Condition Score (see Appendix I); and Cleanliness Score (see Appendix VII). 	•	•	•	•	•	•
	ⓘ [5.7.2]: These two criteria make up the Calf Comfort Assessment .						
5.7.3	If the requirements of Sections 5.1 and/or 5.5 are exceeded, a written intervention plan, as detailed in Appendix III , that addresses, at a minimum, identification of cause(s) and actions taken to correct the occurrence(s) must be implemented to reduce incidence levels.	•	•	•	•	•	•

STANDARD		Step Level									
		1	2	3	4	5	5+				
5.7 Calf, Heifer and Dry Cow Animal Assessments and Reporting <i>Continued</i>											
Weaned Calves to First Calving											
5.7.4 	Operations must conduct a Heifer Comfort Assessment as outlined in Standard 5.7.5. This assessment must be conducted once mid-certification cycle, for all heifers (weaned calves to first calving) at that specific time. Completed assessments must be submitted to G.A.P. and to the Certifier.	•	•	•	•	•	•				
	<p> [5.7.4 a]: The Certifier will communicate to each operation the date the assessment must be submitted by.</p> <p> [5.7.4 b]: All heifers (weaned calves to first calving) onsite during the selected mid-certification cycle month must be evaluated as part of this assessment; however, all animals do not need to be assessed on the same day. The operation may assess by pen or group during the month the assessment is due.</p> <p> [5.7.4 c]: Auditors will also conduct an animal assessment of all heifers (weaned calves to first calving) at the time of the audit.</p>										
	<p>Operations must assess heifers (weaned calves to first calving) for the following:</p> <ul style="list-style-type: none"> a. Body Condition Score (see Appendix I); b. Lameness Assessment (see Appendix II); c. Cleanliness Score (see Appendix VII); d. Lesions and Hair Loss (see Appendix VIII); and e. Swellings Score (see Appendix XIV) <p> [5.7.5]: These five criteria make up the Heifer Comfort Assessment.</p>										
5.7.5		•	•	•	•	•	•				
5.7.6	If the requirements of Sections 5.1 – 5.5 are exceeded, a written intervention plan, as detailed in Appendix III , that addresses, at a minimum, identification of cause(s) and actions taken to correct the occurrence(s) must be implemented to reduce incidence levels.	•	•	•	•	•	•				
Dry Cows											
5.7.7 	Operations must conduct a Dry Cow Comfort Assessment as outlined in Standard 5.7.8. This assessment must be conducted once mid-certification cycle, for the dry cows on site at that specific time. Completed assessments must be submitted to G.A.P. and to the Certifier.	•	•	•	•	•	•				
	<p> [5.7.7 a]: The Certifier will communicate to each operation the date the assessment must be submitted by.</p> <p> [5.7.7 b]: All dry cows onsite during the selected mid-certification cycle month must be evaluated as part of this assessment; however, all dry cows do not need to be assessed on the same day. The operation may assess by pen or group during the month the assessment is due.</p> <p> [5.7.7 c]: Auditors will also conduct an animal assessment of all dry cows onsite at the time of the audit.</p>										

STANDARD		Step Level					
		1	2	3	4	5	5+
5.7 Calf, Heifer and Dry Cow Animal Assessments and Reporting <i>Continued</i>							
Dry Cows <i>Continued</i>							
5.7.8	Operations must assess dry cows for the following: a. Body Condition Score (see Appendix I); b. Lameness Assessment (see Appendix II); c. Cleanliness Score (see Appendix VII); d. Lesions and Hair Loss (see Appendix VIII); and e. Swellings Score (see Appendix XIV)	•	•	•	•	•	•
	① [5.7.8]: These five criteria make up the Dry Cow Comfort Assessment .						
5.7.9	If the requirements of Sections 5.1 – 5.5 are exceeded, a written intervention plan, as detailed in Appendix III , that addresses, at a minimum, identification of cause(s) and actions taken to correct the occurrence(s) must be implemented to reduce incidence levels.	•	•	•	•	•	•
5.8 Cow Comfort Assessments and Reporting							
① G.A.P. is piloting an animal-based outcome approach to managing stocking density (see Standard 8.5.15). While this assessment will be used to assess the impact of stocking density in G.A.P. Certified operations utilizing free stalls, the assessment is required of all producers regardless of system.							
① G.A.P. will also utilize the data collected to provide benchmarking assessments, analysis so that compliance can be adjusted accordingly, and publicly report an anonymized summary of this assessment approach after one certification cycle has been completed.							
① This assessment will be completed by the farm, auditor, and live operations support representatives (if applicable).							
① This specific assessment and reporting requirement is specific to cows that are 0-120 days in milk as they are the most vulnerable.							
① Operations are strongly encouraged to utilize the HerdDogg application for smart phones and devices to complete and report G.A.P.'s Animal Assessments.							
5.8.1 M	Operations must conduct a Cow Comfort Assessment as outlined in Standards 5.8.3 and 5.8.4. This assessment must be conducted every other month for the duration of certification. Completed assessments must be submitted to G.A.P. and to the Certifier.	•	•	•	•	•	•
	① [5.8.1 a]: The Certifier will communicate to each operation the schedule assessments must be submitted by. ① [5.8.1 b]: Auditors will also conduct an animal assessment of the lactating herd at the time of the audit.						

STANDARD		Step Level					
		1	2	3	4	5	5+
5.8 Cow Comfort Assessments and Reporting <i>Continued</i>							
5.8.2	<p>If a G.A.P. Certified operation is part of a brand or dairy company, the brands’ live operations/extension support representatives must conduct a Cow Comfort Assessment for each farm in the brands’ supply chain two (2) times throughout a certification cycle. Completed assessments must be submitted to G.A.P. and to the Certifier.</p> <p>① [5.8.2 a]: <i>It is suggested that the assessments take place roughly once every 7 months from the date of the farm’s certification, as the third-party certifier will also be conducting an assessment at the audit. With this suggested schedule, the 3 assessments (2 conducted by the live operations support representatives; 1 conducted by the third-party certifier) will be evenly dispersed.</i></p> <p>① [5.8.2 b]: <i>The purpose of this collecting assessments from the live operations support representatives is to assess variability in scoring.</i></p>	•	•	•	•	•	•
	<p>Operations must use the protocol and sampling strategy detailed in Appendix XII to complete the <i>Cow Comfort Assessment</i> for the following:</p> <ul style="list-style-type: none"> a. Body Condition Score (see Appendix I); b. Lameness Assessment (see Appendix II); c. Cleanliness Score (see Appendix VII); d. Lesions and Hair Loss (see Appendix VIII); and e. Swellings Score (see Appendix XIV) <p>① [5.8.3 a]: <i>The protocol in Appendix XII focuses specifically on a percentage of cows that are 0-120 days in milk OR in the high yield group.</i></p> <p>① [5.8.3 b]: <i>The auditor will also be assessing cows for broken tails (see Standard 5.6.1).</i></p> <p>① [5.8.3 c]: <i>The five criteria listed in this standard plus the twelve criteria listed in 5.8.4 make up the Cow Comfort Assessment.</i></p>	•	•	•	•	•	•

STANDARD		Step Level					
		1	2	3	4	5	5+
5.8 Cow Comfort Assessments and Reporting <i>Continued</i>							
5.8.4	<p>Operations must report to G.A.P. and to the Certifier the following data points every other month for all animals in their milking herd:</p> <ul style="list-style-type: none"> a. Number of cows being milked each month; b. Incidence for each month (new cases) of: <ul style="list-style-type: none"> i. Clinical mastitis ii. Milk Fever iii. Ketosis iv. Udder Edema v. Retained Placenta vi. Displaced Abomasum vii. Metritis viii. Downers c. Monthly cull rate; d. Monthly mortality rate (see Appendix IV); and e. Monthly average SCC. 	•	•	•	•	•	•
	<p>① [5.8.3 c]: <i>The five criteria listed in 5.8.3 plus the twelve criteria listed in this standard make up the Cow Comfort Assessment.</i></p>						
5.8.5	<p>If the requirements in Sections 5.1 – 5.6 are exceeded, a written intervention plan, as detailed in Appendix III, that addresses, at a minimum, identification of cause(s) and actions taken to correct the occurrence(s) must be implemented to reduce incidence levels.</p>	•	•	•	•	•	•

6 FEED AND WATER

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STANDARD	Step Level					
	1	2	3	4	5	5+
6.1 Water availability						
	All animals must have continuous access to clean water indoors, outdoors and on pasture.	•	•	•	•	•
6.1.1 ^M	① [6.1.1 a]: <i>This includes calves - recent research shows that calves will drink water from birth onwards.</i>					
	① [6.1.1 b]: <i>Dry cows cannot be restricted access to water.</i>					
	① [6.1.1 c]: <i>G.A.P. understands that water may not be available in the milking parlor and holding area in the lead up to the parlor.</i>					
	① [6.1.1 d]: <i>Water must be provided in every outdoor pen(s).</i>					
	① [6.1.1 e]: <i>Water must be provided in each pasture area.</i>					
6.1.2	Drinkers and water troughs must be kept clean and free of debris.	•	•	•	•	•
6.2 Feeding requirements						
① <i>Step 5 and 5+ calves are required to be reared with their dam or nurse cow until weaning. However, if either the dam, nurse cow or calf becomes sick and needs to be separated, the following standards apply.</i>						
Unweaned Calves						
	From day 1 until 8 weeks of age, calves must be offered approximately 20% of their current body weight in milk or milk replacer each day.	•	•	•	•	•
6.2.1	① [6.2.1 a]: <i>For Holstein and similarly sized cattle, this equates to approximately 8-12 quarts (8-12 litres) per day at birth. For Jerseys and similarly sized cattle, this equates to approximately 5-9 quarts (5-9 litres) per day at birth.</i>					
	① [6.2.1 b]: <i>Providing calves with this quantity of milk has shown to produce calves with better long-term growth rates, reduced behavioral signs of hunger and reduced cross sucking.</i>					
	① [6.2.1 c]: <i>See Section 4.6 for Weaning requirements.</i>					
	① [6.2.1 d]: <i>This standard applies to calves not kept with cows (Steps 1-4), or to calves that need supplemental feeding for health reasons (Steps 5-5+).</i>					
	① [6.2.1 e]: <i>This standard does not prohibit operations from starting to wean the amount of milk provided to calves at Step 1 (see Standard 4.6.16 that permits milk to be withdrawn and/or diluted).</i>					
6.2.2	From 8 weeks of age to weaning, operations must maintain the amount of milk provided to calves until withdrawal and/or dilution of milk at weaning.		•	•	•	•
	① [6.2.2]: <i>See Standard 4.6.16 that permits milk to be withdrawn and/or diluted.</i>					
6.2.3	Milk replacers formulated for specific age groups must only be given to that age group.	•	•	•	•	•
	① [6.2.3]: <i>For example, replacers formulated for calves 3-4 weeks should not be given to 0-2-week-old calves.</i>					
6.2.4	Calf diets must be formulated to prevent anemia.	•	•	•	•	•
6.2.5 ^M	Milk or milk replacer must be fed/available to calves at least twice daily.	•				
	① [6.2.5 a]: <i>See Standard 4.6.15 that permits the reduction of milk or milk replacer to gradually wean calves.</i> ① [6.2.5 b]: <i>Ad libitum feeding of calves is compliant with the standard.</i>					










STANDARD		Step Level					
		1	2	3	4	5	5+
6.2 Feeding Requirements <i>Continued</i>							
Unweaned Calves <i>Continued</i>							
6.2.6	Milk or milk replacer must be fed/available to calves at least three times daily up to 8 weeks of age and then twice a day until weaning.		•	•	•	•	•
	① [6.2.6 a]: Research shows that multiple meals per day reduce non-nutritive sucking, lower risk of abomasal damage, and improves health.						
	① [6.2.6 b]: See Standard 4.6.15 that permits the reduction of milk or milk replacer to gradually wean calves.						
	① [6.2.6 c]: This standard only applies to Steps 5 and 5+ if a calf is not being fed by a cow or nurse cow for health reasons. ① [6.2.6 d]: Ad libitum feeding of calves is compliant with the standard.						
6.2.7	Milk or milk replacer must be fed to calves from a feeder equipped with teat(s). For operations utilizing feed buckets with teats, the ratio must be at least 1:1 (calves:teats). For operations utilizing automated calf feeders, the calf:teat ratio must meet the manufacturers recommendations. The calf:teat ration must be adjusted if calf welfare and/or growth is negatively impacted.	•	•	•	•	•	•
	① [6.2.7 a]: Research shows that higher ratios of calves to teats increases competition at the teats, decreases intake and decreases feeding time.						
	① [6.2.7 b]: Research shows calves typically suckle for 30-40 min/day therefore providing milk via teats helps satiate the motivation to suck.						
6.2.8	Waste milk can only be fed to calves if it is pasteurized prior to use.	•	•	•	•		
	① [6.2.8]: In conjunction with Section 3.4 (antibiotic use), operations are encouraged to reduce the feeding of waste milk to calves.						
6.2.9	Feeding waste milk to calves is prohibited.					•	•
	① [6.2.9]: As Step 5-5+ requires calves to be kept with their dam and/or a nurse cow this standard should not be problematic for certified operations.						
6.2.10	Operations that pasteurize milk must sanitize equipment after each feeding.	•	•	•			
	① [6.2.10 a]: This practice minimizes excessive bacterial growth.						
	① [6.2.10 b]: See Standard 6.3.1 on keeping feeding equipment clean.						
6.2.11 H	Calves must be provided with access to forage by 2 weeks of age.	•	•	•	•	•	•
	① [6.2.11 a]: The provision of forage is in addition to milk.						
	① [6.2.11 b]: This standard does not restrict operations from also providing calf starter or grain to calves, or a dry TMR (blend of chopped forage and concentrate).						
	① [6.2.11 c]: This standard does not restrict feeding of lesser quality hays and/or forages that have been finely chopped.						

STANDARDS		Step Level					
		1	2	3	4	5	5+
Weaned Heifer Calves to First Calving							
6.2.12	Heifers must be fed a high-quality diet that reflects the body weight targets the operation wishes to achieve to first service and first calving.	•	•	•	•	•	•
	① [6.2.12]: This standard will be assessed using body condition scoring (Appendix I) and records where applicable.						
6.2.13 ^H	Heifers must be fed palatable rations and forages.	•	•	•	•	•	•
	① [6.2.13]: This standard includes the feeding of silages, haylages and other similar fermented forages.						
6.2.14	Electric fencing at self-feeding silage bunks must not be used to limit animals' access to feed.	•	•	•	•	•	•
6.2.15	Heifer groups must be kept separate from cow groups unless animals can eat without competition at the feeder.	•	•	•	•	•	•
6.2.16	If heifers are fed using a limit-fed strategy (i.e., limit-fed TMR), then they must also be provided with free access to a low nutritive feedstuff (e.g., straw).	•	•	•			
	① [6.2.16 a]: Limit feeding is defined as providing a nutrient dense ration at a predetermined amount. It has been adopted as a strategy for targeted average daily gain goals while reducing fecal nitrogen excretion. (Greter et al., 2015)						
	① [6.2.16 b]: Research shows that limit feeding may negatively impact heifer welfare due to the restriction of regular diurnal feeding patterns and feeding behavior. Limit feeding heifers may result in reduced satiety due to insufficient gut fill or foraging time. Provision of a low nutritive feedstuff allows for the normal expression of feeding behaviors and patterns if this strategy is utilized. (Greter et al., 2015)						
6.2.17	The use of a limit-fed strategy (i.e., limit-fed TMR) for heifers is prohibited.				•	•	•
	① [6.2.17]: This strategy is prohibited at Steps 4-5+ because the standard does not specify a specific nutrient requirement from pasture.						
Cows							
6.2.18	Close-up cow diets must be adjusted as necessary prior to calving to reduce the incidence of metabolic diseases associated with calving (e.g., udder edema, laminitis, ketosis, milk fever etc.).	•	•	•	•	•	•
6.2.19	All cows must have access to palatable fibrous feedstuffs to ensure maintenance of good rumen health.	•	•	•	•	•	•
6.2.20 ^H	Feed must be available to all cows for at least 18 hours each day.	•	•	•	•	•	•
	① [6.2.20 a]: It is understood that when feed bunks/feed passages are being cleaned feed will not be present. Similarly, when cows are in holding areas and being milked, feed may not be available.						
	① [6.2.20 b]: This standard includes pushing up feed as necessary throughout the day.						
6.3 Feed Hygiene							
6.3.1	Feeding equipment must be kept clean.	•	•	•	•	•	•
	① [6.3.1]: This standard includes all equipment used for feeding including, but not limited to, buckets, teats, and mixers.						
6.3.2	Feed in storage bins, feeders and bunkers must not be moldy or mildewed, contaminated by rodents or insects, or otherwise compromised in quality.	•	•	•	•	•	•
6.3.3	Feed areas, feeders and feed troughs must be clean and free of debris.	•	•	•	•	•	•

7 MILKING AREAS, EQUIPMENT MANAGEMENT & MASTITIS

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STANDARD	Step Level					
	1	2	3	4	5	5+
7.1 Raceways & Milking Parlor Holding Areas (Collection Yards)						
7.1.1	Raceways (including indoor raceways and outdoor laneways/tracks) must minimize the risk of hoof injuries.					
	① [7.1.1]: This standard will be evaluated by observation of the raceways as well as lameness assessments (Appendix II).					
7.1.2	If automatic crowd gates are used, care must be taken to ensure that they are not used in a manner that causes injury or stress to the cows. This includes ensuring there is space for the animals to move away from the gate as it moves.					
7.1.3	Thermal comfort needs to be maintained while cattle are in holding areas. This includes, but is not limited to, additional ventilation, circulating fans, misting, and soaking units.					
7.1.4	Once cows have been removed from their pens, stalls, outdoor areas, or pasture, waiting time prior to milking must not exceed 2 hours per milking.					
	① [7.1.5]: This Standard will be verified as part of the on-farm audit; the operation is not required to keep any records to substantiate this standard.					
7.2 Milking Hygiene						
7.2.1	Operations must practice proper sanitary milking procedures including pre-and post-milking teat disinfection.					
	① [7.2.1]: Suitable products include: iodophors, hypochlorite compounds, chlorhexidine, and barrier products.					
7.2.2	Only single use cloths can be used to dry teats.					
	① [7.2.2]: Cloths that are used on one cow and then laundered meet this standard.					
7.2.3	If excess udder hair is removed by singeing/flame clipping: <ul style="list-style-type: none"> a. the flame used must be less than 6 inches (15 cm); b. yellow in color (cool flame); and c. the flame must be quickly passed under the udder to singe the hair off but must not result in any injury to the cow. 					
7.3 Milking Equipment						
7.3.1	Milking equipment must be checked daily to ensure the system is in proper working order.					
7.3.2	Milking machines, including robotic milkers, must undergo maintenance checks at least once every six months. A record must be made of the dates this is carried out. At minimum checks must include: <ul style="list-style-type: none"> a. correct vacuum levels; b. adequate vacuum reserve; c. correct pulsation; d. air leakage characteristics; e. a visual inspection of rubberware; and f. stray voltage checks. 					
	① [7.3.2]: Maintenance checks may be carried out by suitably trained farm staff or external operatives.					

STANDARD	Step Level					
	1	2	3	4	5	5+
7.3 Milking Equipment <i>Continued</i>						
7.3.3 	If robotic milking machines are used, cows must be monitored daily to ensure they are being milked.					
7.4 Milk Quality & Mastitis						
 <i>Intra-mammary infections in dairy cattle are classified into two main areas – (1) sub-clinical or (2) clinical mastitis.</i>						
 <i>Clinical mastitis infections typically exhibit symptoms that are obvious to the naked eye - such as with udder looking swollen, red and/or hot to the touch. Additionally, milk from a cow with clinical mastitis is abnormal in color, with visible clots. Conversely, subclinical mastitis infections typically do not exhibit symptoms that are obvious to the naked eye; therefore, making them more difficult to detect. Instead, Somatic Cell Counts (SCC) are a tool that operations can use to monitor sub-clinical mastitis (in some countries, legal limits for SCC are also imposed, though these are well above the levels required in this standard).</i>						
 <i>Mastitis is a significant health and welfare issue for dairy cattle and is monitored closely by most dairy operations.</i>						
Subclinical Monitoring of Mastitis						
7.4.1 	Monthly average bulk tank somatic cell count (SCC) must be monitored and recorded.					
 [7.4.1]: <i>Monthly averages are calculated by summing all the bulk tank tests for a month and dividing by the number of tests.</i>						
7.4.2	Monthly average bulk tank SCC must not exceed 200,000 cells/ml.					
7.4.3	Monthly average bulk tank SCC must not exceed 175,000 cells/ml.					
7.4.4	Monthly average bulk tank SCC must not exceed 150,000 cells/ml.					
7.4.5	Monthly average bulk tank SCC must not exceed 100,000 cells/ml.					
7.4.6	If the monthly average bulk tank SCC exceeds the thresholds listed in 7.4.2 – 7.4.5, a written intervention plan, as detailed in Appendix III , that addresses, at a minimum, actions taken to address the issue must be implemented immediately.					
Clinical Mastitis Monitoring						
 <i>Incidence of mastitis is calculated as follows: (total number of cows with a case of clinical mastitis each month / total number of cows being milked) X 100</i>						
7.4.7	Each cow must be checked for symptoms of clinical mastitis at each milking. Records must be kept if evidence of clinical mastitis is found.					
 [7.4.7]: <i>This can be done by physically examining the udder and fore milk prior to attaching the cluster, or the use of automated systems checks on electrical conductivity or light emission through milk.</i>						
7.4.8 	Incidence of clinical mastitis must not exceed 30% of the milking herd measured monthly.					
7.4.9	Incidence of clinical mastitis must not exceed 20% of the milking herd measured monthly.					
7.4.10	Incidence of clinical mastitis must not exceed 15% of the milking herd measured monthly.					
7.4.11	Incidence of clinical mastitis must not exceed 10% of the milking herd measured monthly.					

STANDARD		Step Level					
		1	2	3	4	5	5+
Milk Quality & Mastitis <i>Continued</i>							
Clinical Mastitis Monitoring <i>Continued</i>							
7.4.12	If incidence of clinical mastitis exceeds the thresholds listed in 7.4.8-7.4.11, a written intervention plan, as detailed in Appendix III , that addresses, at a minimum, identification of the major cause(s) of mastitis and actions taken to address the issue must be implemented immediately.	•	•	•	•	•	•

8 HOUSING

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STANDARD		Step Level					
		1	2	3	4	5	5+
8.1 General Requirements							
8.1.1	Thermal comfort must be maintained throughout the year for all animals. Mechanical assistance, such as fans and ventilation, misters/foggers, extra bedding, or heated calf boxes can be used.	•	•	•	•	•	•
	ⓘ [8.1.1 a] See Appendix V for Temperature Humidity Index (THI) Chart. ⓘ [8.1.1 b] See Section 9 for animals raised with access to the outdoors and/or pasture.						
8.1.2	Flooring must have a non-slip and/or grooved surface to minimize slips and falls.	•	•	•	•	•	•
	ⓘ [8.1.2] This includes raceways, holding areas and pens.						
8.1.3	Floors must be scraped regularly, such that slurry does not become deeper than 1.5 inches (4 cm) in walkways, alleyways and other non-bedded areas at any given time.	•	•	•	•	•	•
8.2 Indoor Calving Areas							
ⓘ Calving areas could be individual pens, or group maternity pens.							
ⓘ Maternity pens should not house sick or injured cows at the same time.							
8.2.1	Calving areas must be bedded to a minimum depth of 6 inches (15 cm).	•	•	•	•	•	•
	ⓘ [8.2.1]: Bedding includes, but is not limited to, straw, wood shavings, sand, and/or rice hulls - individually or in combination.						
8.2.2	Dirty bedding must be cleaned out and clean bedding added between calvings.	•	•	•	•	•	•
	ⓘ [8.2.2]: This standard does not require you to remove all bedding from the pen in-between each calf born, but rather to remove the soiled bedding and top up with fresh bedding.						
8.2.3	Calving areas must provide a minimum of 120 ft ² (11 m ²) to 150 ft ² (13.9 m ²) per cow.	•	•	•	•	•	•
	ⓘ [8.2.3]: Pens must permit the cow to easily lie down on her side.						
8.2.4 ⓘ	Cows must not be tethered during calving.	•	•	•	•	•	•
	ⓘ [8.2.4]: This standard does not prohibit an operation from restraining a cow if calving assistance is required.						
8.3 Housing for Calves							
<p><i>It is well documented that calves benefit from social and physical contact with other calves from the first week of life onwards. Research shows that calves provided with full social contact from another calf are heavier (because they eat more and eat starter diets earlier), are better able to cope with environmental stressors, are weaned more easily, and learn more easily (i.e., new routines, new equipment).</i></p> <p><i>It is G.A.P.'s intent in future versions of the standard to require pair housing from birth. During this pilot phase, the requirement in 8.3.1 will give farmers the ability to work on successful pair housing of calves.</i></p> <p>See Section 4.6 on Calf Care, Colostrum and Weaning, and Standards 6.2.1 – 6.2.9 on feeding Calves.</p>							

Standards		Step Level					
		1	2	3	4	5	5+
Housing for Calves <i>Continued</i>							
8.3.1 ^M	Calves may only be kept in individual pens or hutches until they reach 14 days of age. By January 1, 2022, Calves must be kept in same sex pairs or small groups at 15 days of age and older.	•					
	① [8.3.1 a] Operations are not required to buy new calf hutches to meet this requirement. Placing two individual hutches together with a shared area in the front of the hutches with no other restrictions to the calves is an example of pair housing.						
8.3.2	Calves must be kept in same sex pairs or small groups by 2 days of age and older		•	•	•		
	① [8.3.2] Calves at Steps 5 and 5+ are excluded from this standard because they are required to be kept with their mothers or with nurse cows.						
8.3.3	Calves must have visual contact with other calves.	•	•	•	•		
8.3.4 ^M	Calves must not be tethered.	•	•	•	•	•	•
	① [8.3.4] This standard does not apply to tie stall operations. See Standards 8.3.11 – 8.3.18 for calves from tie stall units.						
8.3.5 ^M	For calves up to 4 months of age, a minimum of 30 ft ² (2.8 m ²) per calf for Holstein and similarly sized calves, and 24 ft ² (2.2 m ²) per calf for Jersey and similarly sized calves, must be provided.	•	•	•	•	•	•
	① [8.3.5 a] See Standard 8.3.1 and 8.3.2 for calves kept in hutches. Space requirements include hutch and the outside area.						
	① [8.3.5 b] This standard does not apply to tie stall operations. See Standards 8.3.11 – 8.3.18 for calves from tie stall units.						
8.3.6	For calves from 4 to 8 months of age, a minimum of 45 ft ² (4.2 m ²) per for Holstein and similarly sized calves, and 36 ft ² (3.3 m ²) per calf for Jersey and similarly sized calves, must be provided.	•	•	•	•	•	•
	① [8.3.6 a] See Standard 8.3.1 and 8.3.2 for calves kept in hutches. Space requirements include hutch and the outside area.						
	① [8.3.6 b] This standard does not apply to tie stall operations. See Standards 8.3.11 – 8.3.18 for calves from tie stall units.						
8.3.7	Calves kept in hutches must have access to an area outside of the hutch.	•	•	•	•		
	① [8.3.7] This standard does not require the hutches to be outdoors.						
8.3.8	If calf pens or hutches are outdoors, they must be sited and managed to protect calves from weather and reduce disease transmission.	•	•	•	•	•	•
	① [8.3.8] Examples include, but are not limited to, orienting pens east to west to avoid sun exposure, and/or rotating calf hutches after each pair.						
8.3.9	Pens and hutches must have solid floors. Slatted floors are prohibited.	•	•	•	•	•	•
	① [8.3.9] Floors that have a dirt base are acceptable.						
8.3.10	Calf pens and hutches must be dry and well bedded to meet the thermal needs of the calf. Rubber mats alone are not acceptable as the only bedding.	•	•	•	•	•	•
	① [8.3.10] Bedding depth will be assessed using the nesting score in Appendix VI .						
Tie-Stalls for Calves							
8.3.11 ^M	Beginning 1 st January 2027, tie stall systems are prohibited for calves.	•					

STANDARD		Step Level					
		1	2	3	4	5	5+
Housing for Calves <i>Continued</i>							
Tie-Stalls <i>Continued</i>							
8.3.12	Between June 14, 2021 and December 31, 2026, calves reared in tie-stalls must be untied and provided access to an exercise area for at least two (2) hours per day untied.	•					
	① [8.3.12] <i>An exercise area can be indoors or out but is an area where calves can move about freely.</i>						
8.3.13	Neck chains must have a twist link that prevents kinking and pinching.	•					
8.3.14	Neck chains must be long enough for the calf to lie down with its head on the ground, to groom its back, and to lie down and stand up easily.	•					
8.3.15	Tie stalls must allow calves to stand, lie, rise, and rest without injury or pain.	•					
	① [8.3.15] <i>This standard will be assessed using the lesions and hair loss score in Appendix VIII and swellings score in Appendix XIV.</i>						
8.3.16	The use of stanchion stalls is prohibited.	•	•	•	•	•	•
8.3.17	Use of electric cow trainers is prohibited.	•	•	•	•	•	•
8.3.18	Tie stalls are prohibited.		•	•	•	•	•
8.4 Heifer Housing							
General Requirements							
8.4.1 ^M	Housing must allow heifers to stand, lie, rise, and rest without injury or pain.	•	•	•	•	•	•
	① [8.4.1] <i>This standard will be evaluated by the auditor on-farm using Appendix VIII: Lesions and Hair Loss and Appendix XIV: Swellings Score.</i>						
8.4.2	Heifers must always have access to a lying area that is dry and well bedded.	•	•	•	•	•	•
	① [8.4.2] <i>This standard will be assessed by the auditors using the cleanliness score in Appendix VII.</i>						
Bedded Packs							
① <i>Bedded packs include:</i>							
1) <i>Packs where bedding material is added daily resulting in a deep bedded pack. Packs are cleaned out every 4-6 weeks.; and</i>							
2) <i>Packs that begin with deep bedding and are stirred twice daily to facilitate composting. These packs are cleaned out roughly every 6 months.</i>							
<i>In either case, the area provided to the heifers is either fully enclosed or the resting area is completely covered.</i>							
8.4.3	Holstein heifers, and similarly sized animals from 8 months of age to 3-weeks expected pre-calving kept on bedded packs must be provided with a minimum of 60 ft ² (5.6 m ²) of lying area. Jersey heifers, and similarly sized animals from 8 months of age to 3-weeks expected pre-calving kept on bedded packs must be provided with a minimum of 48 ft ² (4.5 m ²) of lying area.	•	•	•	•	•	•

STANDARD		Step Level					
		1	2	3	4	5	5+
8.4 Heifer Housing <i>Continued</i>							
Free-Stalls							
8.4.4	The heifer to stall ratio must not exceed 1.2:1 (1.2 heifers for every 1 stall).	•					
8.4.5	The heifer to stall ratio must not exceed 1:1 (1 heifer for every 1 stall).		•	•	•	•	•
Tie-Stalls							
8.4.6 ⓘ	Beginning 1 st January 2027, tie stall systems are prohibited for heifers.	•					
8.4.7	Between July 1, 2021, and December 31, 2026, heifers reared in tie-stalls must be untied and provided access to an exercise area for at least two (2) hours per day untied.	•					
	ⓘ [8.4.7] <i>An exercise area can be indoors or out but is an area where heifers can move about freely.</i>						
8.4.8	Neck chains must have a twist link that prevents kinking and pinching.	•					
8.4.9	Neck chains must be long enough for the heifer to lie down with its head on the ground, to groom its back, and to lie down and stand up easily.	•					
8.4.10	Heifers-in-training must be provided with their own individual stall.	•					
8.4.11	The use of stanchion stalls is prohibited.	•	•	•	•	•	•
8.4.12	Use of electric cow trainers is prohibited.	•	•	•	•	•	•
8.4.13	Tie stalls are prohibited.		•	•	•	•	•
8.5 Cow Housing							
While dairy cattle spend a large amount of time resting, exercise and freedom of movement are important to an animal's overall health and welfare.							
Until December 31, 2026, use of tie stalls in the G.A.P. Program will be permitted for dairy cattle at Step 1. Beginning, January 1, 2027, operations utilizing tie stalls will no longer be eligible for G.A.P. certification. During the phase out period, operations will be required to untie their cows and heifers daily.							
It is our hope that during the phase out time, operations will be able to renovate existing facilities or build new facilities to maintain G.A.P. certification.							
General Requirements							
8.5.1	Housing must allow cows to stand, lie, rise, and rest without injury or pain.	•	•	•	•	•	•
	ⓘ [8.5.1] <i>This standard will be evaluated by the auditor on-farm using Appendix VIII: Lesions and Hair Loss and Appendix XIV: Swelling Score.</i>						
8.5.2	Cows must always have access to a lying area that is dry and well bedded.	•	•	•	•	•	•
	ⓘ [8.5.2] <i>This standard will be assessed by the auditors using the cleanliness score in Appendix VII.</i>						
8.5.3	Stalls without mattresses (rubber, foam, composite, water beds) must be bedded to a minimum depth of 4 inches (10 cm).	•	•	•	•	•	•
	ⓘ [8.5.3]: <i>In addition to visual inspection of the stalls, this standard will also be assessed using the cleanliness score in Appendix VII, the lesion and hair loss score in Appendix VIII, and the swelling score in Appendix XIV.</i>						

STANDARD	Step Level					
	1	2	3	4	5	5+
8.5 Cow Housing <i>Continued</i>						
General Requirements <i>Continued</i>						
8.5.4	Stalls with mattresses (rubber, foam, composite, water beds) must provide a minimum of an additional 2 inches (5 cm) of bedding.					
	<p>① [8.5.4 a]: For stalls with mats, they may need to have some mechanism (i.e., a bedding keeper) to keep bedding in the stall.</p> <p>① [8.5.4 b]: In addition to visual inspection of the stalls, this standard will also be assessed using the cleanliness score in Appendix VII, the lesions and hair loss score in Appendix VIII, and the swellings score in Appendix XIV.</p>					
Tie Stalls						
8.5.5 M	Beginning January 1, 2027, tie stalls are prohibited.					
8.5.6 M	Between July 1, 2021, and December 31, 2026, lactating and dry cows reared in tie-stalls must be untied and provided access to an exercise area for at least two (2) hours per day.					
	① [8.5.6] In many instances this could be accomplished by untying cows after their first milking and re-tying them after their second milking.					
8.5.7 M	Tie stalls are prohibited.					
8.5.8	Neck chains must have a twist link that prevents kinking and pinching.					
8.5.9	Neck chains must be long enough for the cow to lie down with its head on the ground, to groom its back, and to lie down and stand up easily.					
8.5.10	Tie stalls must allow animals to stand, lie, rise, and rest without injury or pain.					
	① [8.5.10] This standard will be assessed using the lesion and hair loss score in Appendix VIII , and the swellings score in Appendix XIV .					
8.5.11	The use of electric cow trainers is prohibited.					
8.5.12 M	The use of stanchion stalls is prohibited.					
Free Stalls						
	① Rather than setting a strict 1:1 stall ratio for Base Certification (Step 1), G.A.P. will be piloting an animal-based outcome approach (Cow Comfort Assessment - Section 5.8) to managing stocking density.					
8.5.13 M	The cow to stall ratio must not exceed 1.2:1 (1.2 cows for every 1 stall).					
	<p>① [8.5.13 a] The cow to stall ratio is a complex relationship between the number of rows in a barn, feed bunk space, pen design/layout and the cow's preference for different stalls. Rather than set standards incorporating all these possibilities, G.A.P. is testing an animal-based outcomes approach (Section 5.8).</p> <p>① [8.5.13 b] Analysis of the information collected in Section 5.8 will be used to review the impact of this standard on the cow and be used to determine if adjustments to management and/or stocking density need to be made throughout the certification cycle.</p>					
STANDARD	Step Level					

		1	2	3	4	5	5+
8.5 Cow Housing Continued							
Free-Stalls Continued							
8.5.14	There must be at least one stall for every cow in the pen (1:1 cow to stall ratio)		•	•	•	•	•
8.5.15	Free stalls must allow animals to stand, lie, rise, and rest without injury or pain.	•	•	•	•	•	•
<p>① [8.5.15] This standard will be assessed using the lesion, swelling and hair loss score in Appendix VIII.</p>							
Bedded Packs							
<p>① <i>Bedded packs include:</i></p> <p>1) Packs where bedding material is added daily resulting in a deep bedded pack. Packs are cleaned out every 4-6 weeks.; and</p> <p>2) Packs that begin with deep bedding and are stirred twice daily to facilitate composting. These packs are cleaned out roughly every 6 months.</p> <p><i>In either case, the area provided to cows is either fully enclosed or the resting area is completely covered.</i></p>							
8.5.16 ①	Bedded pack/loose housing must provide a minimum rest area to each cow as follows:						
	Body weight (estimated) range lbs(kg)	Minimum bedded area Ft²/cow (m²/cow)					
	1000 – 1199 (450 - 544)	70 (6.5)					
	1200 - 1399 (545 - 634)	80 (7.4)					
	1400 - 1599 (635 - 724)	100 (9.3)					
	1600 - 1799 (725 - 814)	120 (11)					
	1800+ (815+)	140 (14)					
<p>Source: https://thedairylandinitiative.vetmed.wisc.edu/home/housing-module/adult-cow-housing/bedded-pack/</p>							

STANDARD		Step Level					
		1	2	3	4	5	5+
8.6 Bull Housing							
① <i>This refers bulls kept on-farm for breeding purposes.</i>							
8.6.1	Bull pens must be located in an area to allow the bull sight, sound and odor of other cattle and general farm activity.	•	•	•	•	•	•
8.6.2 M	Bull pens must provide a bedded lying area that is at least 144 ft ² (13 m ²) per bull and is indoors or covered.	•	•	•	•	•	•
8.6.3 M	Breeding pens, where the bull is kept in a pen and cows are brought to him, must have an area of at least 300 ft ² (28 m ²).	•	•	•	•	•	•
8.6.4	Bull pens must be designed such that caregivers can remain safe and protected when working with bulls.	•	•	•	•	•	•
8.7 Indoor Enrichments							
<i>This section requires the inclusion of ‘indoor enrichments’. While environmental enrichments are species specific, their overarching purpose is the same – to enrich their environment so that animals can perform behaviors that are important to them thereby improving the quality of their lives. For dairy cattle raised in zero-grazing systems, this can be even more important. Items provided as enrichments are not necessarily created equally, some enrichments offer more than one benefit, and the usefulness of enrichments can differ depending on the stage of life.</i>							
<i>Scientists typically group environmental enrichments into five (5) main categories: social, occupational, physical, sensory, and nutritional. The focus of Section 8.7 for dairy cattle is on what is referred to as ‘occupational’ and ‘tactile’ (sensory) enrichments – those that encourage exercise (and play for calves), grooming and provide opportunity for cattle to perform their natural behaviors.</i>							
<i>Examples of acceptable enrichments can be found in Appendix IX. If the operation wishes to use an item not listed below as an enrichment, please contact G.A.P. directly at info@globalanimalpartnership.org for further consideration.</i>							
8.7.1 M	All animals over 14 days of age must be provided one type of enrichment for each group of animals when housed.	•	•	•	•	•	•
	① [8.7.1 a]: <i>For farms with tie stalls, enrichments must be in the area where heifers and cows spend time untied – see Section 5.3 and 5.4.</i>						
	① [8.7.1 b]: <i>Animals are not required to have enrichments on pasture.</i>						
	① [8.7.1 c]: <i>This requirement includes bull pens.</i>						
	① [8.7.1 d]: <i>Appendix IX details the quantity of each type of enrichments.</i>						
8.7.3	All animals over 14 days of age must be provided with a minimum of two types of enrichment for each group of animals when housed.		•	•	•	•	•
	① [8.7.2]: <i>Appendix IX details the quantity of each type of enrichments.</i>						
8.7.3	Enrichments must be maintained and replaced, as necessary.	•	•	•	•	•	•

STANDARD		Step Level					
		1	2	3	4	5	5+
8.8 Air Quality							
8.8.1	Air quality must be assessed daily in all housing, using calibrated meters or sensory evaluation. Records must be kept when air quality exceeds levels in Standard 8.8.2.	•	•	•	•	•	•
	ⓘ [8.8.1 a]: See Appendix X for air quality evaluation protocol. ⓘ [8.8.1 b]: Operations are not required to purchase calibrated meters. Auditors will use calibrated meters to test air quality during the on-farm audit.						
8.8.2	Air quality levels must not exceed score 2-5 on the air quality scale in Appendix X . If calibrated meters are used, the following levels cannot be exceeded: a. dust: 10 mg per cubic meter; and b. ammonia: 20 ppm.	•	•	•	•	•	•
8.8.3	If air quality is found to exceed the levels in Standard 8.8.2, a written intervention plan, as detailed in Appendix III , designed to improve air quality must be implemented that same day.	•	•	•	•	•	•
8.9 Lighting							
8.9.1	Light intensity in housing during daylight hours, either from artificial or natural light, or a combination of artificial and natural light, must be greater than 50 lux.	•	•	•	•	•	•
	ⓘ [8.9.1]: Cows perceive light intensity less than 50 lux as night-time.						
8.10 Hazard Management							
8.10.1 ⓘ	Equipment, fittings, fences, stalls, gates, and other items in the animals' environment must be maintained to not cause them injury or put them at risk of injury.	•	•	•	•	•	•
8.10.2	Animals must not come into contact with any potentially toxic or harmful substances, such as those used for maintenance, sanitation, cleaning, and/or pest control unless these are being utilized for disease prevention or cure according to the manufacturer's instructions.	•	•	•	•	•	•

9 PASTURE, OUTDOOR PENS AND DRY LOTS

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STANDARD	Step Level					
	1	2	3	4	5	5+
9.1 Outdoor Pens ⓘ An outdoor pen is an area adjacent to a barn or housing structure. It is not the primary living area for the animal, but an additional area for loafing and/or exercise. ⓘ Outdoor pens have little to no vegetative cover. ⓘ Outdoor access is not required at Step 1; however, if it is provided, the indicated standards must be met. ⓘ For Step 2, these requirements relate to 9.3.1 and 9.3.3 . ⓘ This section only applies to Steps 4-5+ outside of the requirements in Section 9.6.						
9.1.1	All outdoor pens must have proper drainage and a manure management plan. ⓘ [9.1.1]: Sites should minimize issues with run-off, as well as issues that may provide potential health risks to animals (e.g., water pooling, uneven ground that could injure hooves).					
9.1.2 ⓘ	Outdoor pens must be maintained daily. ⓘ [9.1.2]: Daily maintenance includes, but is not limited to, scraping pens, grooming areas underneath and around sprinklers, adding additional bedding for thermal comfort.					
9.1.3	Outdoor pens must provide at least as much space per animal indoors as outdoors. ⓘ [9.1.3]: This Standard applies to every age category and/or stage of production at the applicable Step level.					
9.2 Provisions in Outdoor Pens ⓘ This section applies to animals with access to an outdoor pen that is not their primary living area. ⓘ Outdoor access is not required at Step 1; however, if it is provided, the indicated standards must be met. ⓘ For Step 2, these requirements relate to 9.3.1 and 9.3.3 . ⓘ This section only applies to Steps 4-5+ outside of the requirements in Section 9.6.						
9.2.1 ⓘ	Outdoor pens must be constructed to help animals maintain their thermal comfort throughout the year. ⓘ [9.2.1 a]: This includes, but is not limited to, the provision of shade structures, sprinklers/misters, fans, wind blocks and/or additional bedding. ⓘ [9.2.1 b]: Appendix V provides the temperature and relative humidity index (THI) for monitoring and managing the risk of heat stress in cattle. ⓘ [9.2.1 c]: Appendix XI provides a Heat Stress Score for visually assessing heat stress in cows, heifers and calves. ⓘ [9.2.1 d]: See Standard 7.1.4 for maintaining thermal comfort in holding areas.					
9.2.2	When animals are fed outdoors, bunk areas must be shaded. ⓘ [9.2.2 a]: This does not apply to systems where animals are fed at a bunk indoors but also have access to, for example, an outdoor bale feeder. ⓘ [9.2.2 b]: This does not apply to animals while grazing.					
9.2.3	Cattle must be provided with continuous access to water in outdoor pens.					

STANDARD		Step Level					
		1	2	3	4	5	5+
9.3 Outdoor Access							
<p>① <i>This section applies to animals with access to an outdoor pen that is not their primary living area.</i></p> <p>① <i>This section only applies to Steps 4-5+ outside of the requirements in Section 9.6.</i></p>							
Weaned Calves & Heifers to 3 Weeks Pre-Calving							
9.3.1	<p>Weaned calves and heifers to 3 weeks pre-calving must have access to an outdoor pen(s) for at least 8 hours per day when their welfare would not otherwise be adversely affected.</p> <p>① [9.3.1 a]: <i>Weaned calves and heifers to 3 weeks pre-calving may only be removed from outdoor areas when weather (actual or reasonably expected) requires this.</i></p> <p>① [9.3.1 b]: <i>This standard permits an operation to provide access during different times of the day if the total time animals are provided access is at least 8 hours.</i></p>		•	•	•	•	•
Lactating Cows							
9.3.2	<p>Cows must have access to an outdoor pen(s) for at least 6 hours per day when their welfare would not otherwise be adversely affected.</p> <p>① [9.3.2 a]: <i>Cows may only be removed from outdoor areas when weather (actual or reasonably expected) requires this.</i></p> <p>① [9.3.2 b]: <i>This standard permits an operation to provide access during different times of the day if the total time animals are provided access is at least 6 hours.</i></p>			•	•	•	•
Far-Off Cows to 3-Weeks Pre-Calving							
9.3.3	<p>Far-off cows must have continuous access to an outdoor pen for at least 30 days of their dry period when their welfare would not otherwise be adversely affected</p>		•	•	•	•	•
9.4 Dry Lots							
<p>① <i>A dry lot is an outdoor area devoid of vegetative cover and serves as the primary living area for dairy cattle. Exercise and loafing areas are provided within the dry lot area. Dry lots are typically constructed in arid areas with low amounts of precipitation.</i></p> <p>① <i>The use of a dry lot is not required at Step 1; however, if this system is used, the following standards must be met.</i></p>							
9.4.1	<p>All dry lots must have proper drainage and a manure management plan.</p> <p>① [9.4.1]: <i>Sites should minimize issues with run-off, as well as issues that may provide potential health risks to animals (e.g., water pooling, uneven ground that could injure hooves).</i></p>	•	•	•			
9.4.2	<p>Dry lots must be maintained daily.</p> <p>① [9.4.2]: <i>Daily maintenance includes, but is not limited to, scraping pens, grooming areas underneath and around sprinklers, adding additional bedding for thermal comfort.</i></p>	•	•	•			
9.4.3	<p>Holsteins and similarly sized animals must be provided with a minimum of 650 ft² (60.4 m²) per animal. Jerseys and</p>	•	•	•			

similarly sized animals must be provided with a minimum of 520 ft ² (48.3 m ²) per animal.						
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STANDARD		Step Level					
		1	2	3	4	5	5+
9.4 Dry Lots <i>Continued</i>							
9.4.4	At least 120 ft ² (11.1 m ²) per Holstein and similarly sized animal, or 96 ft ² (8.9 m ²) per Jersey or similarly sized animal, of the total space requirement in Standard 9.2.3 must be a covered shade structure so that all animals can rest under the structure simultaneously. ⓘ [9.4.4 a]: <i>It is recommended that structures be a minimum of 12 ft (3.7 m) high.</i> ⓘ [9.4.4 b]: <i>Structures do not need to have side walls.</i>	•	•	•			
9.5 Provisions in Dry Lots							
9.5.1 ⓘ	Dry lots must be constructed to help animals maintain their thermal comfort throughout the year. ⓘ [9.5.1 a]: <i>This includes, but is not limited to, the provision of shade structures, sprinklers/misters, fans, wind blocks and/or additional bedding.</i> ⓘ [9.5.1 b]: <i>Appendix V provides the temperature and relative humidity index (THI) for monitoring and managing the risk of heat stress in cattle.</i> ⓘ [9.5.1 c]: <i>Appendix XI provides a Heat Stress Score for visually assessing heat stress in cows, heifers and calves.</i> ⓘ [9.5.1 d]: <i>See Standard 7.1.4 for maintaining thermal comfort in holding areas.</i>	•	•	•			
9.5.2	When animals are fed outdoors, bunk areas must be shaded.	•	•	•			
9.5.3	Dry lots must provide enrichments as detailed in Section 8.7 .	•	•	•			
9.6 Time on Pasture							
Weaned Calves & Heifers to 3 Weeks Pre-Calving							
9.6.1	Weaned calves and heifers to 3 weeks pre-calving must have daily unrestricted access to pasture for at least 8 hours per day when their welfare would not otherwise be adversely affected. ⓘ [9.6.1]: <i>Weaned calves and heifers to 3 weeks pre-calving may only be removed from pasture when weather (actual or reasonably expected) requires this.</i>				•	•	•
Lactating Cows							
9.6.2	Pasture access for lactating cows must be for a minimum of 6 hours per day. ⓘ [9.6.2]: <i>The 6-hours can be between milkings, overnight, or a combination.</i>				•	•	•
9.6.3 ⓘ	Cows must spend at least 120 days per calendar year (365 days) on pasture. ⓘ [9.6.3]: <i>If cows are outwintered on frozen or sacrificial pastures, this time can be included in this calculation.</i>				•	•	
9.6.4	Cows must spend at least 200 days per calendar year (365 days) on pasture. ⓘ [9.6.4]: <i>If cows are outwintered on frozen or sacrificial pastures, this time can be included in this calculation.</i>						•
9.6.5	When cows are removed from pasture, they must have access to an outdoor area(s) as detailed in Sections 9.1 - 9.3.				•	•	•

STANDARD	Step Level
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		1	2	3	4	5	5+
9.6 Time on Pasture <i>Continued</i>							
Far-Off Cows to 3-Weeks Pre-Calving							
9.6.6	Far-off cows must have daily unrestricted access to pasture for at least 30 days of their dry period when their welfare would not otherwise be adversely affected				•	•	•
9.7 Pasture Planning & Management							
<p>① <i>It is understood that some dairy farms have pasture areas for cows and for stored forage production (e.g., hay fields). The following pasture sub-sections apply only to areas that cows have access to, and not pastures used for stored forage production.</i></p> <p>① <i>The term pasture includes managed pastures, planted pastures, rangelands, grasslands, wooded areas, and any other land where cattle have access to vegetation with live roots in the ground with at least 75% vegetative cover).</i></p>							
9.7.1	<p>Operations must have a grazing plan that details:</p> <ul style="list-style-type: none"> a. the types of forages as well as the availability on-farm and rotation(s) through paddocks; b. any potential herd health issues such as bloat, metabolic disorders, and toxic plants; and c. how the operation manages seasonal transitions and climatic challenges. <p>① [9.7.1 a]: <i>This standard does not set requirements on the amount of pasture that must be consumed by cattle.</i></p> <p>① [9.7.1 b]: <i>This plan can be a component of the herd health plan (see Section 2.3).</i></p> <p>① [9.7.1 c]: <i>Seasonal transitions and climatic challenges includes excessive rain, freeze/thaw, drought etc.</i></p> <p>① [9.7.1 d]: <i>This includes the use of sacrificial pastures, or other outdoor areas so that overall pasture quality can be maintained.</i></p>				•	•	•
9.7.2	Operations must have a plan to transition animals to pasture to ensure that digestive upset is minimized.				•	•	•
9.7.3 ¹⁰	<p>On pasture, animals must have access to natural or artificial structures help them maintain their thermal comfort.</p> <p>① [9.7.3 a]: <i>See Appendix V (THI Chart) and Appendix XI (Heat Stress).</i></p> <p>① [9.7.3 b]: <i>This includes, but is not limited to, pastures with mature trees that provide shade for all animals to use at the same time, shade structures, wind breaks, or restricting access to times of the day when the sun is less intense or absent (i.e., nighttime).</i></p>				•	•	•
9.7.4	<p>Operations must have a soil health monitoring plan that includes at a minimum:</p> <ul style="list-style-type: none"> a. soil testing; b. monitoring biological activity; c. maintenance of at least 75% vegetative cover (live roots in the ground); and d. minimizing soil compaction. 				•	•	•

STANDARD		Step Level					
		1	2	3	4	5	5+
9.8 Records of Outdoor and Pasture Access							
9.8.1	<p>Records must be kept that include:</p> <ul style="list-style-type: none"> a. the dates (start and end dates) when cattle have access to an outdoor area; b. the dates (start and end dates) when cattle have access to pasture; c. the dates (start and end dates) when cattle are removed from outdoor areas and/or pasture; and/or d. the reason why cattle are removed from outdoor areas and/or pasture. 		•	•	•	•	•

10 RODENT AND PREDATOR CONTROL

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STANDARD	Step Level					
	1	2	3	4	5	5+
10.1 Rodent Control Program						
<p>i <i>The Standards in this Section are applicable to any rodent control efforts, whether contracted or not.</i></p>						
10.1.1	<p>Good sanitation must be the first level of rodent control.</p> <p>i [10.1.1]: <i>Good sanitation includes exclusion of rodents from buildings, bays, or bins where grain or other feeds are stored; clear up of spills of feed; and management of trash to reduce attracting or harboring rodents.</i></p>					
10.1.2	<p>If good sanitation is ineffective an integrated rodent control program must be implemented. This program must include:</p> <ul style="list-style-type: none"> a. methods of control that only target rodents; b. an assessment of different methods of lethal control; c. if traps are used, they must be species specific, appropriately located and must be designed to cause rapid death; d. licensed rodenticides are only used in areas where traps will be ineffective (traps are most effective in enclosed spaces). 					
10.1.3	<p>Glue boards for rodents, drowning and drowning traps are prohibited.</p> <p>i [10.1.3]: <i>This standard does not restrict the use of glue boards for fly control.</i></p>					
10.1.4	<p>Multiple catch traps (e.g., tin cats) used for monitoring rodent populations must be baited with rodenticide.</p>					
10.2 Predator Control						
<p>i <i>The standards in this Section are applicable to any predator control efforts, whether contracted or arranged by an outside third party.</i></p> <p>i <i>Control of predators must not violate any local, state, provincial, territorial, federal, national, or other laws.</i></p>						
10.2.1	<p>When predators are considered to be a problem, each operation must have a predator control program in place.</p>					
10.2.2	<p>Non-lethal exclusion of predators from housing and occupied outdoor/pasture areas must be the first level of control.</p>					
10.2.3	<p>If non-lethal methods are ineffective and cattle are at risk, shooting is the only method of lethal control allowed and is only allowed if the shooter is skilled and the shot kills immediately.</p>					
10.2.4 H	<p>Poisons, drowning, all snares, leg hold traps and all traps other than live traps are prohibited.</p>					
10.2.5	<p>Any live traps must be checked at least once daily, and captures must be acted upon within 24 hours.</p> <p>i [10.2.5]: <i>Live traps, also known as humane traps, do not contain poison or in any other way result in lethal control.</i></p>					
10.2.6	<p>Any live traps must be checked at least twice daily, and captures must be acted upon immediately.</p> <p>i [10.2.6]: <i>Live traps, also known as humane traps, do not contain poison or in any other way result in lethal control.</i></p>					

11 LOADING AND TRANSPORT

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This section applies to animals shipped off the operation, animals purchased from other G.A.P. Certified operations and any transport within an operation.

① See [Standards 1.4.1, 1.4.2, 4.6.17-19](#) that requires Step 1-4 calves to be at least 5 days old before being transported off-farm.

STANDARD		Step Level					
		1	2	3	4	5	5+
11.1 Feed and Water Withdrawal							
11.1.1 M	Water must be continuously available until loading begins.	•	•	•	•	•	•
Calves <6 months of age							
11.1.2	Feed cannot be withheld for more than 2 hours prior to loading.	•	•	•	•	•	•
Heifers >6 months to calving							
11.1.3	Feed cannot be withheld for more than 4 hours prior to loading.	•	•	•	•	•	•
Cows							
11.1.4	Feed cannot be withheld for more than 6 hours prior to loading.	•	•	•	•	•	•
11.2 Condition of Animals at Transport							
11.2.1 M	Transporting animals off the operation that meet any of the following conditions is prohibited: a. sick, injured, weak, or disabled; b. below a body condition score of 2.0; c. having a lameness score of 3; or d. non-ambulatory.	•	•	•	•	•	•
	① [11.2.1 a]: This standard excludes animals transported to a veterinarian for treatment or to a facility for specialized care.						
	① [11.2.1 b]: See Appendix XIII for additional guidance on assessing fitness for transport.						
	① [11.2.1 c]: See Appendices I and II for body condition score and lameness scores, respectively.						
11.2.2	Within 12 weeks of expected calving date pregnant cows: a. cannot be transported more than twice; and b. transport duration must not exceed 6 hours.	•	•	•	•	•	•
	① [11.2.2]: This standard permits operations to transport cattle out to pastures and then back for close observation during calving.						
11.2.3	Lactating cows must be milked within 2 hours prior to transport.	•	•	•	•	•	•
	① [11.2.3]: Lactating cows need to be milked approximately every 12 hours at a minimum. This standard is to address discomfort from a full udder that would occur if the cow was not milked prior to transport.						
11.3 Loading and Unloading							
11.3.1	Animals must always be handled calmly during loading and unloading.	•	•	•	•	•	•

STANDARDS		Step Level					
		1	2	3	4	5	5+
11.3 Loading and Unloading <i>Continued</i>							
11.3.2 C	Animals must never be kicked, hit, or mistreated in any way during loading and unloading. ① [11.3.2]: See Section 4.3 on Handling.	•	•	•	•	•	•
11.3.3	Electric prods must never be carried during routine handling and must only be used as a tool of last resort when human or animal safety is at risk. If use is necessary: a. prods must not have a voltage that produces a vocal response from the animal; b. prods must only be used on the hindquarters of the animal; and c. animals must be given a chance to respond to the prod before being re-applied. ① [11.3.3]: <i>Hindquarters excludes the anus, testes, vulva, and udder.</i>	•	•	•	•	•	•
11.3.4 H	The use of electric prods on calves 6 months of age or younger is prohibited.	•	•	•	•	•	•
11.3.5 H	The use of electric prods on sick, injured and/or non-ambulatory animals is prohibited.	•	•	•	•	•	•
11.4 Transport and Loading Equipment							
11.4.1	Transport trailers must be cleaned after each use. ① [11.4.1 a]: <i>The purpose of this standard is to minimize the potential for disease transmission.</i> ① [11.4.1 b]: <i>In this context ‘each use’ refers to when a truck would have had all animals off-loaded. For example, if a hauler picked up male calves at three (3) different farms, they would be required to clean the truck once all calves had been off-loaded at their final destination and not in between each farm where calves were picked up.</i> ① [11.4.1 c]: <i>‘Cleaned’ means removal of fecal material and bedding. Ideally the trailer would also be washed, but it is understood that this may not be possible at certain times of the year.</i>	•	•	•	•	•	•
11.4.2	Transport trailers, including ramps and chutes, must be in good condition.	•	•	•	•	•	•
11.4.3	The incline angle of ramp slopes for the first deck must be no more than 20 degrees.	•	•	•	•	•	•
11.4.4	Ramps must be fitted with cleats, treads, non-slip surfaces or stair steps to minimize the risk of slips and falls during loading and unloading.	•	•	•	•	•	•
11.4.5	Trailers must have access point(s) for drivers to be able to access animals if necessary, during transport.	•	•	•	•	•	•
11.4.6	Horned and non-horned animals must not be transported in the same compartment unless they have been reared together.	•	•	•	•	•	•
11.4.7	Calves 6 months old and younger must be provided with bedding in transport. ① [11.4.7 a]: <i>Bedding is provided for comfort and to provide additional traction during transport to minimize transport.</i> ① [11.4.7 b]: <i>See 11.4.8 for thermal comfort.</i>	•	•	•	•	•	•

STANDARD		Step Level					
		1	2	3	4	5	5+
11.4 Transport and Loading Equipment <i>Continued</i>							
11.4.8	Animals must be protected from weather during transport.	•	•	•	•	•	•
	<p>① [11.4.8]: <i>The following are examples of modifications made to the transport conditions to protect livestock:</i></p> <ul style="list-style-type: none"> - <i>Cover the trailer with a roof;</i> - <i>Close, block or plug a portion of the ventilation holes/slots;</i> - <i>Adjust the number of animals on the truck;</i> - <i>Transport animals early in the morning or at night to avoid high temperatures; and/or</i> - <i>Use a published 'Livestock Weather Safety Index' to determine weather risks that pose a risk to cattle (see Appendix V).</i> 						
11.5 Transport Personnel Responsibilities and Procedures							
① <i>It is recommended that truck drivers be Beef Quality Assurance (BQA) Transportation certified, or equivalent.</i>							
11.5.1	There must be a clear, written procedure, which includes actions and contact numbers, for the driver to follow in case of an accident or emergency.	•	•	•	•	•	•
11.5.2	The driver must be knowledgeable in all of his/her responsibilities and transport protocols.	•	•	•	•	•	•
11.5.3	The driver is responsible for all animals on the truck during transport.	•	•	•	•	•	•
11.6 Transport Duration							
① <i>Transport duration is calculated from the first animal loaded onto the truck at the originating operation, to arrival at the receiving operation.</i>							
① <i>Transport duration is assessed based on transport under normal conditions. Unexpected incidences may extend normal transport duration, such as a traffic or accident/weather related delays, and these situations are not included in the calculation.</i>							
11.6.1	Transport duration must not exceed 8 hours.	•	•	•	•		
	<p>① [11.6.1 a]: <i>This standard applies to male calves destined for the veal industry, and female calves being shipped to specialized heifer rearing operations.</i></p> <p>① [11.6.1 b]: <i>See Standard 11.7.1 for records requirements.</i></p>						
11.6.2	Within an operation, transport duration must not exceed 2 hours.	•	•	•	•	•	•
	① [11.6.2]: <i>This transport time permits operations to move cattle around within an operation (e.g., different pastures; to a calf barn)</i>						
11.6.3	Transport duration must not exceed 2 hours.					•	•
11.6.3	There must be at least 48 hours between the end of one journey and the start of the next.	•	•	•	•	•	•

STANDARD		Step Level					
		1	2	3	4	5	5+
11.7 Transport Records							
11.7.1	Transport records must be kept for each vehicle, made available for review, and include:						
	<ul style="list-style-type: none"> a. date of transport; b. loading start time; c. arrival time; d. destination; e. number and age/type of animal being transported (e.g., calves, dry cows, or lactating cows); f. any mortality, injuries, major delays, or other issues, if these occur. 	•	•	•	•	•	•
<i> ⓘ [11.7.1]: This standard does not apply to transport within a farm – see Standard 11.6.2.</i>							
11.8 Sale/Auction Barns							
11.8.1 	Sale of any animals through auction or sale barns is prohibited.					•	•

Appendix I Body Condition Scoring (BCS)

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The following 5-point scoring system for cows and heifers >12 months of age (Table A), and 4-point scoring system for calves and heifers <12 months of age (Table 2) are to be used when assessing Body Condition Score (BCS) on-farm. The scores below utilize whole numbers; however, half numbers (e.g., 2.5) can be used when assessing animals.

View each cow from the side and behind while they are standing, focusing on the areas described in the table below.

Refer to [Appendix XII](#) to determine sample size when sampling dairy cows for Section 5.8.

(See next page for scoring system)

Table 1: 5-Point BCS for Dairy Cows and Heifers >12 months of age (source: *Edmonson et al. 1989*)


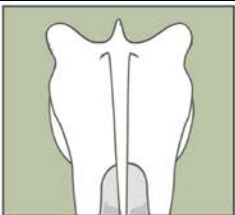
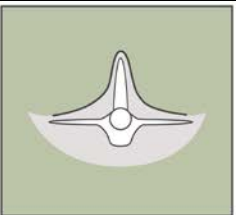
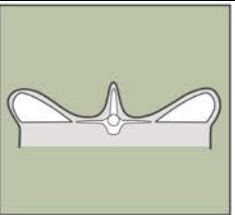


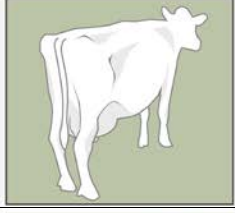

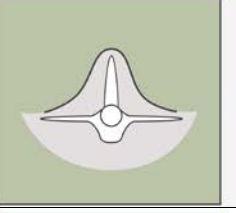
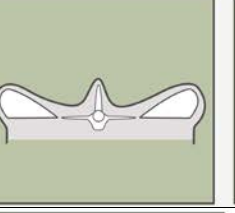
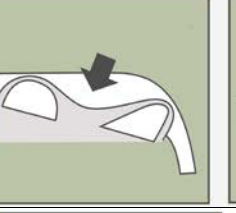
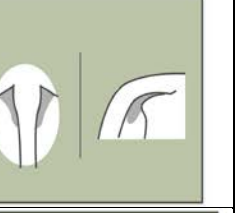


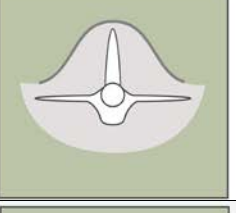
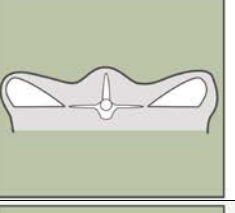
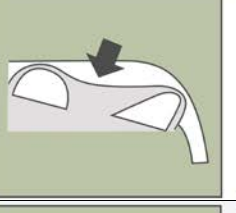

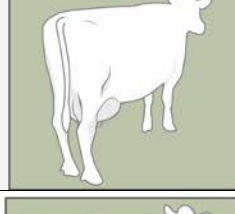
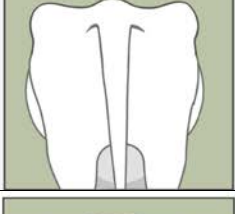
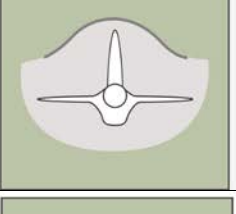
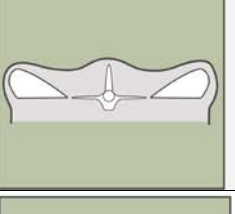
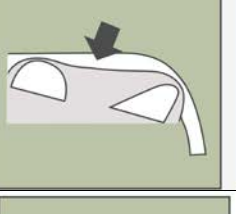
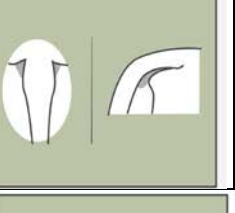
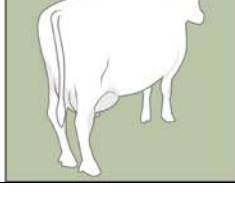
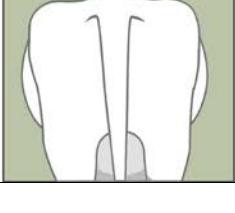
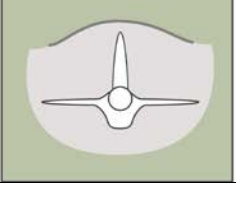
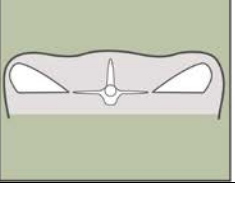
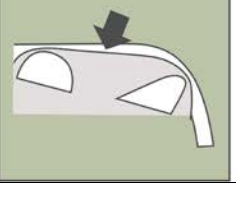
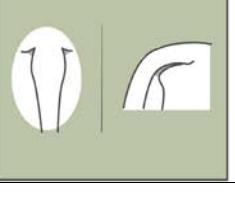
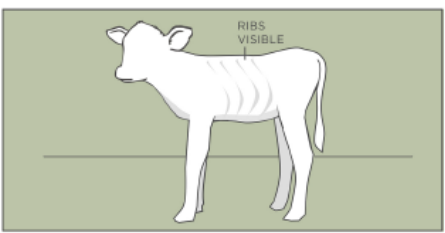
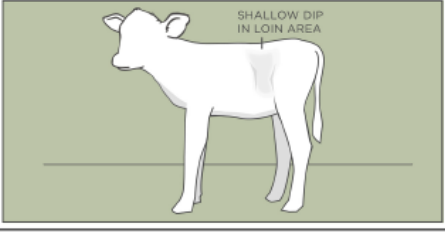
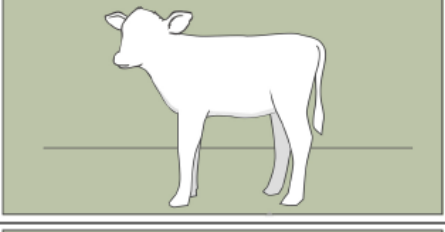
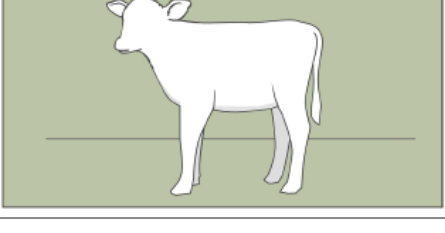
Score	Description	Overall Body	Rear View	Lumbar vertebrae <i>rear view</i>	Cross-section hook bones <i>rear view</i>	Line between hook bones & pin bones <i>side view</i>	Cavity between tailhead & pin bones <i>rear side</i>
1	Poor						
2	Lean						
3	Good						
4	Fat						
5	Very Fat						

Table B. 4-Point BCS for Dairy Calves and Heifers <12 months of age

View each calf and heifer <12 months of age from the side while they are standing, focusing on the areas described in the table below. It is suggested to score the animals after feeding. **If the ribs are visible, then the BCS is less than 2.0 and additional attention to that animal is required.**

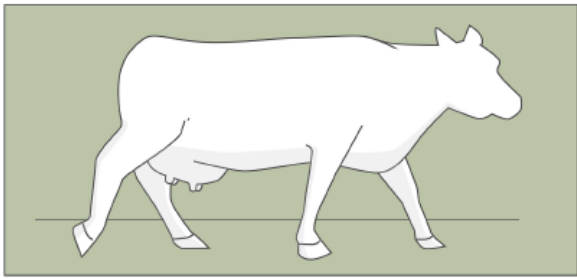
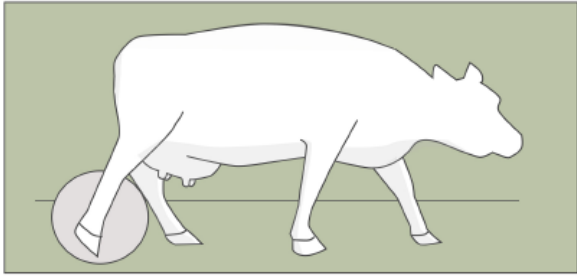
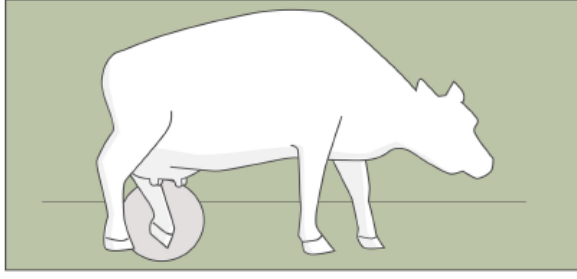
Score	Descriptor	
1	POOR	
2	THIN	
3	GOOD	
4	FAT	

Appendix II Lameness

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Lameness assessments must be conducting when animals are walking, and not scored when they are stationary (unless it is obvious an animal is lame and moving them would compromise their welfare). For operations with tie stalls, cows should be assessed as they return to the stalls after their mandatory time per day untied. For operations with free stalls, cows can be assessed in their pen or as they exit the milking parlor. Refer to [Appendix XII](#) to determine sample size prior to conducting bimonthly Cow Comfort Assessments required in Section 5.8.

Pls note, if the cow has just risen, let her take a few steps before evaluating for lameness as she may be stiff from lying.

Score	Description	Posture/Gait
1	<p>Sound</p> <p>Long, smooth strides. Flat back. Head steady.</p>	
2	<p>Moderately Lame</p> <p>Some short strides and choppy movement. Joints may be stiff. Head may bob as cow moves. Back arch. Favoring one limb.</p>	
3	<p>Severely Lame</p> <p>Reluctant to move. Hesitant and deliberate strides with an obvious head bob. Severe limp/unable to bear weight on one or more limbs. Pronounced back arch.</p>	

Adapted from Flower & Weary 2006

Appendix III Intervention Plan

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The intervention plan template below must be completed and implemented each time thresholds are exceeded. Auditors and/or certifiers will review these plans as part of the audit process.

The following areas of the standard require an intervention plan when thresholds are exceeded: (i) mortality; (ii) animal assessments; (iii) clinical and subclinical mastitis monitoring; and (iv) air quality.

Example template:

Intervention plan questions	Operation's response
Which standard has not been met?	
Why has the problem occurred?	
What actions have been put in place to resolve the issue now?	
What actions have been put in place to ensure this does not happen again in the future?	

Example of completed template:

Intervention plan questions	Operation's response
Which standard has not been met?	<i>Standard 5.2.1: The percentage of cows that scored very lame was 10%</i>
Why has the problem occurred?	<i>We have had an outbreak of digital dermatitis (hairy heel warts). This may have come into the herd via heifers purchased to increase herd size</i>
What actions have been put in place to resolve the issue now?	<i>We have treated individual cows with a topical spray.</i>
What actions have been put in place to ensure this does not happen again in the future?	<i>We have started foot bathing cows as a routine procedure. Now we have reached the herd size we wish to remain at, we will not bring in any other animals but will keep a closed herd.</i>

Appendix IV Sample Mortality Calculation

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Mortality is defined as any animal that dies (either of known or unknown causes) or is found dead on-farm but excludes stillborn calves. The calculation for calf mortality must include perinatal death.

- ① **A stillborn calf is defined as any calf born dead due to a difficult calving (dystocia) (assisted or unassisted).**
- ① **Perinatal death is defined as calves born alive without dystocia but die within 48 hours of birth.**
- ① **Culls are defined as any animals that have been euthanized or removed from the herd and shipped off-farm (either to slaughter or to another farm).**
- ① **Mortality will be assessed by a review of records.**

Cow Mortality is calculated using the following formula:

$$\text{Mortality} = [(\# \text{ cows died in 12 months}) / \text{average herd size in 12 months}] \times 100]$$

Where:

- i) **monthly herd size** is calculated from: (# cows in milk + # far-off cows + # of close-up cows) – culls¹; and
- ii) **average herd size** is calculated from: sum of monthly herd size for each month / 12

¹culls includes animals that have been euthanized, shipped off-farm, and/or predated

EXAMPLE A – Cows:

Month	# in milk cows	# far-off cows	# close-up cows	# of culls	Total # of Cows (herd size) by month (# in milk + # far-off + # close-up - # of culls)	# cows that died
Jan	150	6	5	5	156	0
Feb	152	6	7	5	160	1
Mar	160	4	5	4	165	1
Apr	165	5	5	6	169	0
May	170	5	5	5	175	0
Jun	175	5	4	5	179	0
Jul	173	4	4	2	179	1
Aug	165	5	5	3	172	0
Sep	163	6	6	5	170	1
Oct	157	8	8	3	170	1
Nov	155	9	8	3	169	0

Dec	156	7	7	4	166	0
AVERAGE Herd Size (rounded to whole #)					169	
TOTAL						5

CALCULATION (Mortality rate based on annual average herd size)

Total Mortality for 12-month period	5
Average Herd Size over 12-month period	169
% mortality	3.0%

Standard for Steps 1-3 permits 4% mortality, so in this example, the operation meets the standard.

... Continued on next page

Weaned Heifers Calves to 3 Weeks Pre-Calving mortality is calculated using the following formula:

$$\text{Mortality} = [(\# \text{ heifers died in 12 months}) / \text{average herd size in 12 months}] \times 100]$$

Where:

- i) **monthly herd size** is calculated from: (# weaned heifers+ # purchased heifers) – culls¹; and
 ii) **average herd size** is calculated from: sum of monthly herd size for each month / 12

¹ culls includes animals that have been euthanized, shipped off-farm, and/or predated

EXAMPLE B – Weaned Heifers Calves to 3 Weeks Pre-Calving:

Month	# of weaned heifers	# of purchased heifers	# of culls*	Total # of heifers (herd size) by month (# weaned + # purchased - # of culls)	# heifers that died
Jan	75	50	7	118	0
Feb	65	54	5	114	0
Mar	62	52	3	111	1
Apr	68	55	4	119	0
May	73	53	3	123	0
Jun	71	51	6	116	0
Jul	76	56	4	128	0
Aug	69	54	3	120	1
Sep	70	53	3	120	0
Oct	71	55	5	121	0
Nov	68	55	7	116	0
Dec	74	51	10	115	0
AVERAGE Herd Size (rounded)				118	
TOTAL					2

CALCULATION (Mortality rate based on annual average herd size)

Total Mortality for 12-month period	2
Average Herd Size over 12-month period	118
% mortality	1.7%

Standard for Steps 1-3 permits 2% mortality, so in this example, the operation meets the standard.

Mortality for **unweaned calves** is calculated using the following formula:

Mortality = [(# calves died¹ in 12 months) / total # of calves in 12 months] x 100]

and total herd size is calculated from: (# born each month) – culls

¹ Excludes stillborn calves (any calf born dead due to a difficult calving (dystocia) whether assisted or unassisted) but includes perinatal death (calves born alive without dystocia but die within 48 hours of birth).

EXAMPLE C – Unweaned Calves:

Month	# born each month	# of culls*	Total # of calves (# born - # of culls)	# calves that died
Jan	110	55	55	3
Feb	105	53	52	2
Mar	93	51	42	1
Apr	95	47	48	1
May	120	62	58	1
Jun	110	54	56	1
Jul	115	59	56	1
Aug	123	62	61	1
Sep	101	53	48	1
Oct	99	48	51	2
Nov	105	53	52	2
Dec	99	51	48	3
TOTAL			612	19

*culls include animals that have been euthanized, shipped off-farm (including bull calves), and/or predated

CALCULATION (Mortality rate based on annual total numbers NOT averages)

Total Mortality for 12-month period	19
Total # of calves born over 12-month period	612
% mortality	3.1%

Standard for Steps 1-3 permits 6% mortality, so in this example, the operation meets the standard.

Appendix V Temperature Humidity Index (THI) Chart

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Operations need to utilize a variety of tools (ventilation, shade, and misters/sprinklers) to keep dairy cows from getting heat stressed because it is well documented that heat stress can have negative impacts on cow welfare, feed intake, fertility, overall cow health and milk production. Both temperature and humidity need to be considered when determining the potential impact on dairy cows. **Table 1 from Collier et al., 2012, University of Arizona** details the impact of temperature and humidity on the cow.

Table 1: The heat stress and temperature-humidity index (THI) chart




Temperature		% Relative Humidity																		
°F	°C	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
72	22.0	64	65	65	65	66	66	67	67	67	68	68	69	69	69	70	70	70	71	71
73	23.0	65	65	66	66	66	67	67	68	68	68	69	69	70	70	71	71	71	72	72
74	23.5	65	66	66	67	67	67	68	68	69	69	70	70	70	71	71	72	72	73	73
75	24.0	66	66	67	67	68	68	68	69	69	70	70	71	71	72	72	73	73	74	74
76	24.5	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75
77	25.0	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76
78	25.5	67	68	68	69	69	70	70	71	71	72	73	73	74	74	75	75	76	76	77
79	26.0	67	68	69	69	70	70	71	71	72	73	73	74	74	75	76	76	77	77	78
80	26.5	68	69	69	70	70	71	72	72	73	73	74	75	75	76	76	77	78	78	79
81	27.0	68	69	70	70	71	72	72	73	73	74	75	75	76	77	77	78	78	79	80
82	28.0	69	69	70	71	71	72	73	73	74	75	75	76	77	77	78	79	79	80	81
83	28.5	69	70	71	71	72	73	73	74	75	75	76	77	78	78	79	80	80	81	82
84	29.0	70	70	71	72	73	73	74	75	75	76	77	78	78	79	80	80	81	82	83
85	29.5	70	71	72	72	73	74	75	75	76	77	78	78	79	80	81	81	82	83	84
86	30.0	71	71	72	73	74	74	75	76	77	78	78	79	80	81	81	82	83	84	84
87	30.5	71	72	73	73	74	75	76	77	77	78	79	80	81	81	82	83	84	85	85
88	31.0	72	72	73	74	75	76	76	77	78	79	80	81	81	82	83	84	85	86	86
89	31.5	72	73	74	75	75	76	77	78	79	80	80	81	82	83	84	85	86	86	87
90	32.0	72	73	74	75	76	77	78	79	79	80	81	82	83	84	85	86	86	87	88
91	33.0	73	74	75	76	76	77	78	79	80	81	82	83	84	85	86	86	87	88	89
92	33.5	73	74	75	76	77	78	79	80	81	82	83	84	85	85	86	87	88	89	90
93	34.0	74	75	76	77	78	79	80	80	81	82	83	85	85	86	87	88	89	90	91
94	34.5	74	75	76	77	78	79	80	81	82	83	84	86	86	87	88	89	90	91	92
95	35.0	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93
96	35.5	75	76	77	78	79	80	81	82	83	85	86	87	88	89	90	91	92	93	94
97	36.0	76	77	78	79	80	81	82	83	84	85	86	87	88	89	91	92	93	94	95
98	36.5	76	77	78	80	80	82	83	83	85	86	87	88	89	90	91	92	93	94	95
99	37.0	76	78	79	80	81	82	83	84	85	87	88	89	90	91	92	93	94	95	96
100	38.0	77	78	79	81	82	83	84	85	86	87	88	90	91	92	93	94	95	96	98
101	38.5	77	79	80	81	82	83	84	86	87	88	89	90	92	93	94	95	96	98	99
102	39.0	78	79	80	82	83	84	85	86	87	89	90	91	92	94	95	96	97	98	100
103	39.5	78	79	81	82	83	84	86	87	88	89	91	92	93	94	96	97	98	99	101
104	40.0	79	80	81	83	84	85	86	88	89	90	91	93	94	95	96	98	99	100	101
105	40.5	80	80	82	83	84	86	87	88	89	91	92	93	95	96	97	99	100	101	102
106	41.0	80	81	82	84	85	87	88	89	90	91	93	94	95	97	98	99	101	102	103
107	41.5	80	81	83	84	85	87	88	89	91	92	94	95	96	98	99	100	102	103	104

Stress Threshold Milk yield loss begins	Mid-Moderate Stress Milk losses - 5.95 lb/cow/day	Moderate Severe Stress Milk losses - 8.8 lb/cow/day	Severe Stress Extreme danger of heat stroke
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Appendix VI Nesting Score for Calves

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Standard 8.3.10 requires that pens for calves be bedded to for comfort and warmth; however, their needs change seasonally. In the summer months, a nesting score 1 would be acceptable, because the calf only needs bedding for comfort reasons and not for warmth. In the winter months, a nesting score 2 would be acceptable if the calf also had a calf jacket on, but otherwise a nesting score 3 would be required. Calves need to be able to bury themselves into the bedding for warmth, so during the winter months, bedding must also include the provision of long straw. Best practice is to assess bedding/nesting approximately an hour after feeding. Observe all calves.

1	<p>LYING ON TOP OF BEDDING</p> <p>When the calf is lying down, no bedding covers any part of the foot or leg</p>	
2	<p>LEGS PARTIALLY COVERED</p> <p>Parts of the leg are visible while other (typically lower) parts are covered by bedding</p>	
3	<p>LEGS COMPLETELY COVERED</p> <p>Deep bedding covers all the way up the legs</p>	

Scale adapted from: (1) University of Wisconsin-Madison Agriculture Podcasts, Division of Extension: Calf Housing: Part 4 Determining Nesting Scores, Dr. David Kammel (UW-Madison/UWEX) and Dr. Vicky Lauer (ANIMART) and (2) Lago et al., 2006

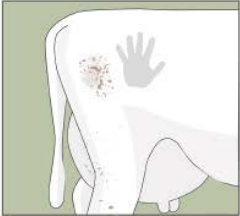





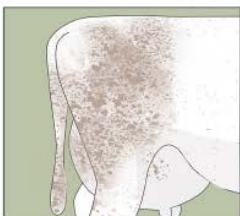


Appendix VII Cleanliness Score

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Included in this appendix are a cleanliness score for heifers and cows (table 1), as well as calves (table 2). The scores are useful to quantify potential issues with management and factors affecting health and welfare. In its simplest form, the cleanliness score can be used to identify dirty or wet lying areas (belly, hindquarters and/or side affected), dirty lane or walkways (legs affected) or because of udder health concerns (udder cleanliness).

When completing the assessment for heifers and cows, animals are to be assessed from the side and rear view of the animal, assessing the lower legs, hind quarters and udder and teats. With each animal, score each of the three areas of the animal as 1, 2 or 3. Tabulate the totals in each column and divide by the number of animals scored. Compliance to the standard will be determined by assessing the score in each column.

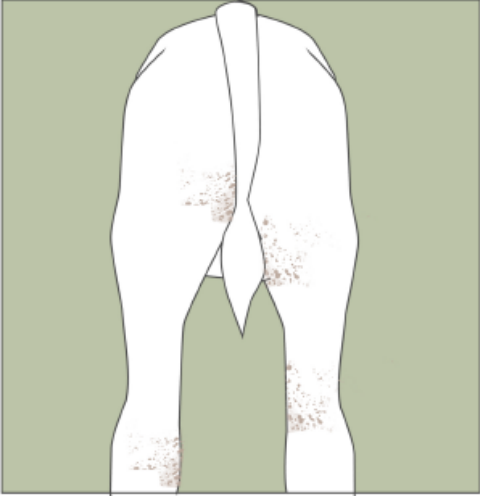


Table 1: Heifer and Cow Cleanliness score

Score	Description	Back, flank and Tail	Lower hind leg	Udder
1	<p>CLEAN</p> <p>No dirt or less than 10% (a hand size) is splashed with fresh or dry material</p>			
2	<p>DIRTY</p> <p>There at least a hand-sized area of dirt, but less than 50% of the area is dirty</p>			
3	<p>VERY DIRTY</p> <p>There is an area of dirtiness (i.e. layer or plaques or dirt) amounting to at least forearm length (12") in any dimension</p>			

Adapted from: AssureWel's Cleanliness score
<http://www.assurewel.org/dairy cows/cleanliness.html>

When completing the assessment for calves, animals are to be assessed from the assessing the rump, tail and rear legs. With each animal, score the animal as 1, 2 or 3. Tabulate the totals in each column and divide by the number of animals scored. Compliance to the standard will be determined by assessing the score in each column.

Table 2: Calves

1	2	3
 <p data-bbox="323 1008 449 1040">CLEAN</p> <p data-bbox="226 1073 546 1127">No or minimal dirt on tail, rump, or rear legs</p>	 <p data-bbox="863 1019 968 1052">DIRTY</p> <p data-bbox="749 1084 1081 1166">At least a hand-sized area of dirt/feces on tail, rump, or rear legs</p>	 <p data-bbox="1346 1019 1556 1052">VERY DIRTY</p> <p data-bbox="1291 1084 1602 1166">More than a hand-sized area of dirt/feces on tail, rump, or rear legs</p>

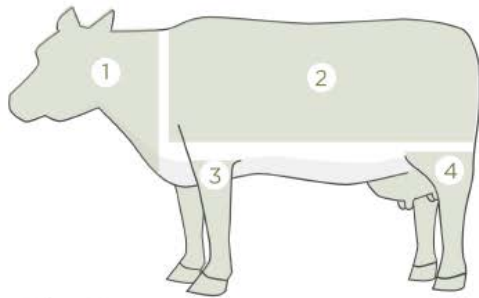
Adapted from Panivivat et al 2004

Appendix VIII Lesions and Hair Loss Score

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The lesions and hair loss score is used to help identify potential comfort issues with equipment, pens, stalls, and bedding. When completing the assessments, visually assess the four (4) regions of the animal (see picture below), from a distance not exceeding 6 ft (1.8m). With each animal, use the 1, 2 or 3 score below to score each of the four areas of the animal. Tabulate the totals in each column and divide by the number of animals scored. Compliance to the standard will be determined by assessing the score in each column.

(Score adapted from AssureWel: <http://www.assurewel.org/dairy cows/hairloss%2clesionsandswellings.html>)



Check:

1. Head and neck
2. Body (flank, back, hindquarter)
3. Front legs
4. Rear legs, udders and teats

For hairless patches and lesions greater or equal to the size of a U.S. Quarter.



┌ 1 inch ─┐

Score	Description	
1	<p>No hair loss or lesions</p> <p>No lesions or hairless patches \geq the size of a quarter</p>	
2	<p>Hairless patch</p> <p>One or more hairless patch(es) \geq the size of a quarter (may include scars)</p>	
3	<p>Lesion (or lesion and hairless patch)</p> <p>One or more lesions (areas of skin damage i.e. wound or scab) \geq 1 the size of a quarter</p> <p><small>(Score as a lesion even if accompanied by a hairless patch. Do not include scars)</small></p>	

Appendix IX Enrichments

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Section 8.7 and Standard 9.5.4 require the provision of enrichments.

The *aim* of enrichments for dairy cattle is to enrich their environment so that they can perform behaviors that are important to them, thereby improving the quality of their lives. For dairy cattle raised in zero-grazing systems or in dry lots, this can be even more important. Items provided as enrichments are not necessarily created equally; some enrichments offer more than one benefit, and the usefulness of enrichments can differ depending on the stage of life.

Scientists typically group environmental enrichments into five (5) main categories: social, occupational, physical, sensory, and nutritional. Acceptable environmental enrichments for dairy cattle in this standard fall into the ‘occupational’ and ‘tactile’ (sensory) enrichments – those that encourage exercise (and play for calves), grooming and provide opportunity for cattle to perform their natural behaviors.



EXAMPLES OF ACCEPTABLE ENRICHMENTS:




The table below lists **acceptable enrichments** and is by no means exhaustive. The examples and accompanying explanation are intended to help the reader understand why the enrichment is meaningful, as well as detail the conditions for use.


If an operation intends to use an item that is not listed below as an enrichment, please contact G.A.P. directly at info@globalanimalpartnership.org for further consideration.



TYPE	PHOTO	DESCRIPTION
Rubber teats	 <p data-bbox="405 735 655 760"><i>Photo: Anne Malleau</i></p>	<p data-bbox="1587 217 1787 277">Which animals? Unweaned calves</p> <p data-bbox="1587 326 1965 672">Why is it an enrichment? Calves are highly motivated to suck. Coupled with feeding colostrum and milk/milk replacer through teats, the provision of additional teats helps satisfy this behavior. The absence of teats increases the likelihood of cross-sucking when reared in pairs or groups.</p> <p data-bbox="1587 716 1892 776">What are the criteria for acceptable use?</p> <ul data-bbox="1587 789 1976 1070" style="list-style-type: none"> • 1 teat per calf when housed in pairs. • 1 teat per 5 calves when housed in groups. • Provided at natural sucking height. • Must remain in the pen permanently.

...continued

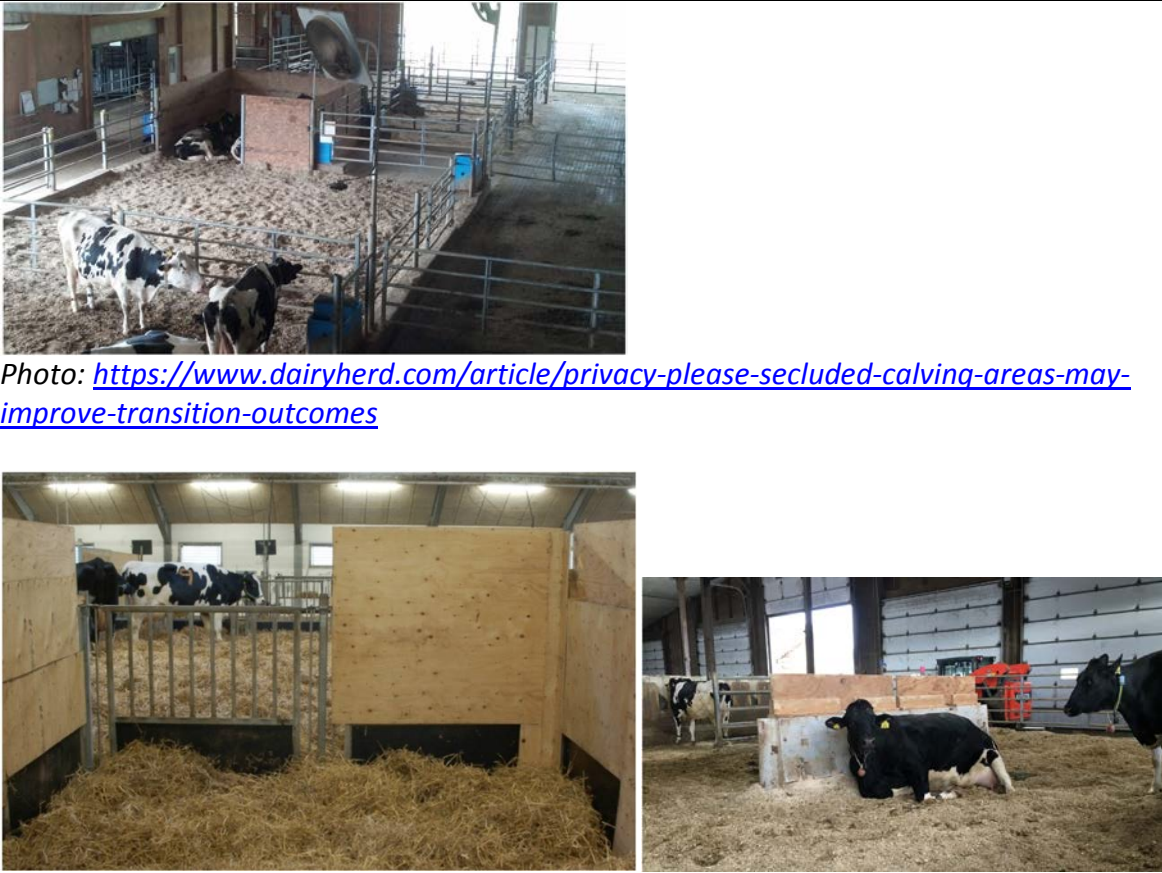
TYPE	PHOTO	DESCRIPTION
<p>Stationary/fixed brushes (re-purposed push broom heads)</p>	<div style="display: flex; justify-content: space-around;">   </div> <p><i>Photo: photo:</i></p>	<p>Which animals? All</p> <p>Why is it an enrichment? It is well documented that cattle readily seek out and use brushes when provided. Cattle use the brushes to groom themselves, which helps remove unwanted dirt, and organisms from their coats. Grooming also helps cattle cope with stressful situations.</p> <p>What are the criteria for acceptable use? 1 brush per calf pen/hutch 1 brush per 20 animals</p> <p>Must remain in the pen permanently.</p>

TYPE	PHOTO	DESCRIPTION
<p>Automated brushes</p>	<div style="display: flex; justify-content: space-around;">   </div> <p style="text-align: center;"> <i>Photo: https://www.progressivedairy.com/topics/calves-heifers/calf-brushes-promote-calf-health-and-well-being</i> <i>Photo: Dr. Emily Linder, University of Florida</i> </p> <div style="text-align: center; margin-top: 20px;">  <p><i>Photo: https://www.fwi.co.uk/livestock/health-welfare/buyers-guide-5-of-the-latest-cow-brushes</i></p> </div>	<p>Which animals? All</p> <p>Why is it an enrichment? It is well documented that cattle readily seek out and use brushes when provided. Cattle use the brushes to groom themselves, rub and scratch which helps remove unwanted dirt, and organisms from their coats. Research has shown that grooming also helps cattle cope with stressful situations.</p> <p>What are the criteria for acceptable use? Cows: 1 brush per 60 animals for purpose built rotating brushes. 1 brush per 50 animals for purpose built stationary brushes.</p> <p>Heifers: 1 mini-brush per every 4 heifers.</p> <p>Must remain in the pen permanently.</p>


TYPE	PHOTO	DESCRIPTION
<p>Rubber chain links/Hanging rubber toys</p>	 <p>Photo: https://easyfix.com/student-research-exploring-an-environment-of-entertainment-for-calves/</p>	<p>Which animals? Unweaned calves</p> <p>Why is it an enrichment? Calves are highly motivated to suck. The provision of additional rubber or rubber coated items provides them with an opportunity to satisfy their need to suck/chew. The absence of items for calves to suck on increases the likelihood of cross-sucking when reared in pairs or groups.</p> <p>What are the criteria for acceptable use? 1 'toy' per calf pair 1 'toy' per 10 calves when housed in groups. Must remain in the pen permanently.</p> <p>Toys must be suspended at an accessible height (calves quickly lose interest in toys on the ground)</p>

TYPE	PHOTO	DESCRIPTION
Fresh straw	<p data-bbox="415 217 1052 248">https://www.youtube.com/watch?v=eLNAWZEZDoo</p> <div data-bbox="415 248 1041 764"> <p data-bbox="436 253 751 280">YouTube veryclevercow</p> <p data-bbox="436 285 758 313">Baby Heifer Calves Playing ▾</p>  </div> <div data-bbox="415 800 1003 1312"> <p data-bbox="426 813 741 841">YouTube Melissa Cornett</p> <p data-bbox="426 846 858 873">Dairy Calves Playing in Group Housing ▾</p>  </div>	<p data-bbox="1587 217 1787 245">Which animals?</p> <p data-bbox="1587 253 1801 280">Unweaned calves</p> <p data-bbox="1587 326 1898 354">Why is it an enrichment?</p> <p data-bbox="1587 362 1976 496">Calves are highly motivated to play. Providing fresh bedding often elicits play behavior and is an indicator of positive welfare.</p> <p data-bbox="1587 540 1892 602">What are the criteria for acceptable use?</p> <p data-bbox="1587 610 1965 638">Fresh piles straw added weekly</p>

TYPE	PHOTO	DESCRIPTION
Hanging balls	 <p data-bbox="409 808 695 837"><i>Photo: futurecow.com</i></p>	<p data-bbox="1587 215 1787 280">Which animals? Unweaned calves</p> <p data-bbox="1587 326 1955 459">Why is it an enrichment? Calves are highly motivated to play and it is seen as an indicator of positive welfare.</p> <p data-bbox="1587 505 1892 675">What are the criteria for acceptable use? 1 ball per 10 calves Must remain in the pen permanently.</p>

TYPE	PHOTO	DESCRIPTION
<p>Areas of exclusion / visual barriers</p>	 <p>Photo: https://www.dairyherd.com/article/privacy-please-secluded-calving-areas-may-improve-transition-outcomes</p> <p>Both lower photos on this page: Katherine Creutzinger</p>	<p>Which animals? All</p> <p>Why is it an enrichment? Close up cows will use areas of exclusion to calve, as cattle naturally will seek to remove themselves from the herd close to the calving period. Cattle of all ages will use visual barriers and areas of exclusion to manage social interactions as they provide areas where they can hide from dominant or more aggressive cattle.</p> <p>What are the criteria for acceptable use? Solid vertical blinds / dense netting to create a visual barrier.</p>

...continued

TYPE	PHOTO	DESCRIPTION
Additional stalls		<p>Which animals? All</p> <p>Why is it an enrichment? It is well documented that not all stalls are created equal in the eyes of a cow. Providing empty stalls allows cows the choice to avoid stalls that are less desirable.</p> <p>What are the criteria for acceptable use? 1 additional stall for every 30 cows.</p>

Appendix X Sensory Evaluation of Air Quality

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Most operations do not use calibrated equipment to assess air quality when cows are housed. While this type of specialized equipment is an accurate way to measure air quality, it is typically too costly for everyday use. Below is a subjective score that can be used to assess air quality during daily monitoring.

Scores 2-5 (Moderate, Strong, Very Strong, and Overpowering) indicate that ammonia and dust are excessive and need to be addressed immediately for both human safety and animal health.

Technique:

1. Score air quality **twice** during each visit to cow housing - when you first enter the barn (first impression), and then just prior to leaving the barn.
2. Record your air quality score.
3. Make any necessary adjustments to ventilation, management, etc. to improve air quality in your barn(s).

Scoring Air Quality			Action Required?
0	ZERO	odor and dust not noticeable (easy to breathe)	No - acceptable air quality
1	WEAK	odor and dust hardly noticeable	
2	MODERATE	odor and dust distinct, annoying (watery eyes and/or coughing)	Yes – needs work to improve air quality
3	STRONG	odor and dust irritating (stinging eyes and mouth, and/or excessive coughing)	
4	VERY STRONG	odor and dust bearable (stinging eyes and mouth, excessive coughing, and/or pain when swallowing)	
5	OVERPOWERING	odor and dust unbearable, you need to leave the barn (hurts to breathe in)	

Please note: Third-party auditors will be using calibrated equipment for measuring air quality during on-farm audits.

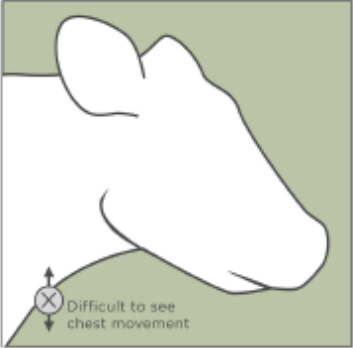


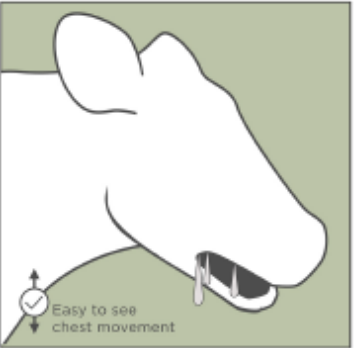
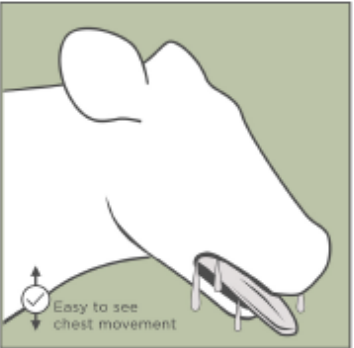
Appendix XI Heat Stress Score

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This panting score tool is used if a producer or auditor needs to describe a cow that is heat stressed.

Watch cows individually for the following symptoms of heat stress, paying special attention to the head and chest.

Score

1	2	3	4	5
 <p>Difficult to see chest movement</p>	 <p>Easy to see chest movement</p>	 <p>Easy to see chest movement</p>	 <p>Easy to see chest movement</p>	 <p>Easy to see chest movement</p>
<p>NORMAL</p> <p>No panting, normal breathing - difficult to see chest movement</p>	<p>ELEVATED</p> <p>Slight panting, increased breathing - easy to see chest movement, mouth closed</p>	<p>MODERATE</p> <p>Moderate panting and/or drool or small amount of saliva</p>	<p>HEAVY</p> <p>Heavy open-mouthed panting, saliva usually present</p>	<p>SEVERE</p> <p>Severe open-mouthed panting, accompanied by protruding tongue and excessive salivation - usually with neck extending forward</p>

Adapted from: Mader et al. 2006.

Appendix XII: Protocol for Within Cycle Cow Comfort Assessments - Number of Animals and Selection of Animals to Assess [Back to Table of Contents](#)

G.A.P.'s 5-Step® Animal Welfare Standard for Dairy Cattle v1.0 requires animal-based outcome assessments for lactating cows to be conducted:

- i. by the third-party certifier, during the audit;
- ii. by the operation, every other month for cows (see [Section 5.8](#)); and
- iii. by the group representative(s), twice per certification cycle (if the operation is part of a brand or dairy company; see [Standard 5.8.2](#)).

This appendix is used to determine the number of lactating cows each operation is required to assess, and the sampling strategy. The specific requirements of each assessment can be found in **Section 5.1-5.6 (and the associated Appendices)** of this standard.

The focus of the cow comfort assessments conducted by the operation and the group representative(s) (if applicable) that are to be submitted throughout the certification cycle to G.A.P. and the operation's Certifier, will be the animals in the herd which have the most risk of exhibiting issues that impact their welfare. This group of animals has been identified **as cows in the lactating herd that are between 0-120 days in milk** (sometimes referred to as the 'high group') and that typically make up approximately 30% of the operation's lactating herd.

This sampling strategy does not mean that the operation does not need to assess other animals in the herd regularly. This within cycle reporting sampling strategy and frequency is only specifically applied to this stage of production (cows that are between 0-120 days in milk). Other stages of production, as detailed in **Section 5.7** also require within cycle reporting; however, all animals are required to be scored.

Part 1: Determine the number of cows to assess.

Table 1: The number of cows between 0-120 days in milk to be assessed will be based on the size of the operation using this table.

Herd Size	Percentage of cows 0-120 days in milk to be assessed
1-50	100%
51-100	60%
101 – 499	40%
≥ 500	30%

For example,

- A) a 100-cow lactating herd is estimated to have 30 cows (100 x 30%) between 0-120 days in milk.
60% of 30 cows in the high group = **18 cows to evaluate**

- B) For example, a 300-cow lactating herd is estimated to have 90 cows in the 0-120 days in milk group.
40% of 90 cows in the 0-120 days in milk = **36 cows to evaluate**
- C) For example, a 2000-cow lactating herd is estimated to have 600 cows in the 0-120 days in milk group.
30% of 600 cows in the 0-120 days in milk = **180 cows to evaluate**

Part 2: How to select the sub-sample of cows calculated in Part 1.

It is important that cows are selected at semi-regular intervals to ensure that the sample is representative of the herd. For example, if an operation has cows between 0-120 days grouped into more than 1 pen, then the sampling strategy would need to be spread across the total number of pens.

To determine your sampling strategy:

- i. Divide the number calculated in Part 1 above by the number of groups or pens of cows between 0-120 days. For example, using the 2000-cow lactating herd example above, if the operation had their animals divided into 5 pens, then 36 cows from each of the 5 pens would need to be evaluated.
- ii. Then take the total number of animals that are between 0-120 days in milk from each pen and divide that by the total number of animals that you need to sample. Using this same example, if 600 cows in this same 2000-cow lactating herd were between 0-120 days in milk, and those 600 cows were divided up between 5 pens, then that would mean each pen has 120 cows that between 0-120 days in milk. Therefore, the operation should be assessing roughly every 3rd cow in each pen.

Here is the full calculation for clarity:

A 2000-cow herd is estimated to have 600 cows in that are between 0-120 days in milk (roughly 30%).

Table 1 requires that 30% of the 600 cows be assessed by the farm every other month, and by the group representative twice a certification cycle.
30% x 600 cows = 180 cows to assess.

The operation has the cows that are between 0-120 days in milk within 5 pens.

180 cows to assess / 5 pens = 36 cows to assess per pen AND

600 cows / 5 pens = 120 cows per pen

120 cows per pen / 36 cows to assess per pen = 3.33

Therefore, in each pen, the operation will assess every 3rd cow until they have assessed 36 cows in each pen that are between 0-120 days in milk.

Appendix XIII Fitness for Transport

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Per Standard 11.2.1, operations need to ensure that only animals that are fit to handle transport are loaded onto transport trucks/trailers. Animals that are unfit must not be transported unless they are transported to a veterinarian for treatment or to a facility for specialized care. Operations can use this checklist of signs and symptoms to make sure no unfit animals are transported:

DO NOT TRANSPORT IF THE ANIMAL IS/HAS:	
i.	Non-ambulatory
ii.	Labored breathing
iii.	Gangrenous udder
iv.	Poor body condition (less than a score 2)
v.	Unable to bear weight on all of its legs (lameness score 3)
vi.	A fracture that impedes movement
vii.	Unhealed injuries, lesions, or open wounds
viii.	Hobbled for treatment
ix.	Dehydrated
x.	Fever
xi.	Eye carcinoma
xii.	Likely to calve during the journey
xiii.	Given birth in the last 48 hours
xiv.	Hypothermia / Hyperthermia
xv.	Prolapsed uterus or sever rectal / vaginal prolapse
xvi.	Navel infection
xvii.	Any signs of illness, injury or condition that indicates it will suffer during transport
xviii.	Untreated displaced abomasum

Adapted from Livestock Transport in Canada: Are you sure that animal is fit for the trip? (CFIA, 2020)

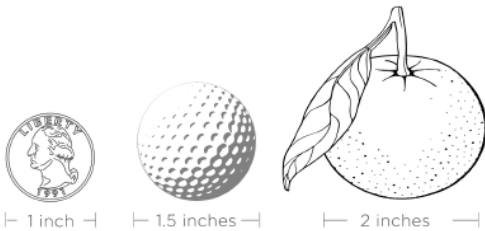
Appendix XIV Swellings Score

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The swellings score is used to help identify potential comfort issues with equipment, pens, stalls, and bedding. When completing the assessments, visually assess the front and rear legs of the animal, from a distance not exceeding 6 ft (1.8m). With each animal, use the 1, 2 or 3 score below to score front and rear legs of the animal. Tabulate the totals in each column and divide by the number of animals scored. Compliance to the standard will be determined by assessing the score in each column.

(Score adapted from AssureWel: <http://www.assurewel.org/dairy cows/hairloss%2Clesionsandswellings.html>)

For swelling equal to or greater than the size of a U.S. Quarter.



Score	Description	
1	<p>No swelling</p> <p>No swelling or no swelling \geq the size of a quarter</p>	
2	<p>Mild Swelling</p> <p>Mild swelling such that the normal anatomy of the area is enlarged, poorly defined or obscured.</p> <p>Around the hock and the knee this will be apparent as a lack of definition of the tendons and other structures around the joint, and the hock will appear to have lost the 'waist' to the joint. On other parts of the body, the swelling will be 1 to 2 inches (2.5- 5cm) in diameter (e.g. a golf ball.)</p>	
3	<p>Substantial swelling</p> <p>Substantial swelling is an abnormal enlargement which is a prominent or pronounced extension away from the body.</p> <p>Around the hock this will be apparent as an obviously rounded swelling >2 inches (>5cm) in diameter, (e.g. the size of a clementine.)</p>	

Glossary

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When referenced within the standards, the following terms are defined as follows:

Term	Definition
Artificially reared	<i>Not reared by a cow. Reared using milk or milk replacer via a bottle or other feeder.</i>
Assisted calving	<i>Any calving where it is necessary for there to be human intervention in the birthing process.</i>
Bands	<i>Used in castration. Bands can be either 1) long, strapped elastic loops that are ratcheted tight and secured with a locking clip; or 2) small, narrow elastic loops with flat edges.</i>
Bedded pack	<i>A system of housing where a group of animals is kept in a large open bedded barn with no individual stalls. Bedding is added continuously to the pack. Also known as loose housing.</i>
Branding	<i>Identification by marking an animal's hide with a hot or super-cooled iron.</i>
Bloodless clamp	<i>Used in castration. A large clamp designed to crush the spermatic cord. Crushing of the spermatic cord results in non-functioning testicles.</i>
Calf/calves	<i>Animals from birth to weaning</i>
Care-giver	<i>Employees, whether full-time, part-time, seasonal, contractual, or family members, with responsibility in the care, management and/or milking of the animals on farm.</i>
Castration	<i>The removal of a bull's testicles.</i>
Cattle crush	<i>A purpose-built stall designed to hold cattle safely while they are examined, given veterinary treatment or while management tasks are carried out (also known as squeeze chute).</i>
Close-up cow	<i>The three-week period before a heifer/cow is expected to calve.</i>
Cull	<i>An animal that has been removed from the operation as a management decision. Includes animals that have been euthanized and shipped off-farm (either to slaughter or to another farm).</i>
Dehorning	<i>Removal of developed horn from an animal after it has attached to the skull. For the purpose of this standard, removal of any living horn tissue after 21 days of age.</i>
Disbudding	<i>Removal of the horn-producing cells in calves where the horn buds are still free-floating and not yet attached to the frontal bone of the skull. For the purposes of this standard, any removal of living horn tissue prior to 21 days of age.</i>
Ear notch	<i>Small, usually triangular, section(s) cut out of the edge of an animal's ear for identification.</i>
EID (see also RFID)	<i>Electronic Identification. An ear tag (or a bolus) that can transmit a short-range signal with the animal's unique ID to an electronic reader.</i>
Electro-immobilization	<i>Use of low frequency electrical current to immobilize an animal. The animal is paralyzed but can still feel pain.</i>
Emasculator	<i>A castration tool simultaneously clamps/crushes and cuts the spermatic cord.</i>

Term	Definition
Emasculatome	<i>A bloodless castration tool that clamps/crushes the spermatic cord.</i>
Euthanasia	<i>The act of killing individual animals on-farm in response to an irrecoverable illness or injury.</i>
Far-off cow	<i>A cow that has been dried off until they are within 3 weeks (21 days) of expected calving date.</i>
Grandfather clause	<i>In the G.A.P. program, a grandfather clause is applied only at the initial audit, to exempt certain animals from the requirements of a standard due to the operation being previously unaware of the requirements of the G.A.P. standards.</i>
Heifer	<i>Female bovine from weaning until first calving.</i>
Herd	<i>A segregated group of cattle.</i>
Housing	<i>A roofed structure that provides protection from wind, rain, snow and other adverse weather conditions.</i>
Lameness	<i>Lameness is the inability to use one or more limbs in a normal manner.</i>
Last resort	<i>When the health and/or welfare of the animal or the handler is at risk.</i>
Loose housing	<i>A system of housing where a group of animals is kept in a large open bedded barn with no individual stalls. Bedding is added continuously to the pack. Also known as bedded pack housing.</i>
Mortality	<i>A record of animals that have died (either of known or unknown causes) or is found dead on-farm but excludes stillborn calves. (The calculation for calf mortality must include perinatal death).</i>
Off-label / extra-label medication use	<i>Use of prescription medication for an unapproved indication or in an unapproved age group, unapproved dosage, or unapproved form of administration. Wormers and other parasite treatments are not generally prescription medication.</i>
Operation	<i>A farm or ranch raising dairy cattle</i>
Organophosphates	<i>A chemical compound often used as a pesticide, which has been shown to have adverse effects on the nervous system of humans and animals.</i>
Outdoor lot	<i>An outdoor non-pasture pen/area such as a dry lot or concrete pad where cattle are held.</i>
Pain relief	<i>Use of sedative, analgesic and/or local anesthetic to block or numb pain.</i>
Pasture	<i>Any area where cattle have access to vegetation, such as rangeland, grassland, planted pastures, managed pastures, wooded areas, or harvested crop areas (for clean-up).</i>
Perinatal death	<i>Calves born alive without dystocia but die within 48 hours of birth.</i>
Rings	<i>Used in castration. Small, narrow elastic loops/bands with rounded edges.</i>
RFID (see also EID)	<i>Radio Frequency Identification. An ear tag (or a bolus) that can transmit a short-range signal with the animal's unique ID to an electronic reader.</i>
Replacement stock	<i>All female cattle for the context of this standard – calves, heifers, and cows but NOT bulls.</i>
Squeeze chute	<i>A purpose-built stall designed to hold cattle safely while they are examined, given veterinary treatment or while management tasks are carried out (also known as cattle crush).</i>
Still-born calf	<i>Any calf born dead due to a difficult calving (dystocia) (assisted or unassisted).</i>

Term	Definition
Sub-therapeutic	<i>Administering treatment in a preventative manner when animals are not sick; this includes low doses of medication over an extended period or using medication routinely. Sub-therapeutic treatment is a dose of treatment that is less/below what is used for treating disease or producing an optimal therapeutic effect.</i>
Tail switch	<i>Tuft of hair at the end of the tail.</i>
Therapeutic	<i>Administering treatment to cattle that are sick or injured.</i>
Transition period	<i>Refers to an animal between the period three weeks before calving to three weeks post-calving (i.e., not producing milk to calving to producing milk).</i>
Unique identification	<i>A marking that allows a G.A.P. auditor to easily distinguish/identify between different animals.</i>
Veal	<i>Meat from a calf that is less than 650 lbs. (294.8 kg) live weight and are 26 weeks of age or younger.</i>
Waste milk	<i>Milk that is not suitable for the milk tank (i.e., not saleable). This includes colostrum, transition milk, milk from cows with mastitis and milk from cows that have been treated with antibiotics.</i>
Weaning	<i>Cessation of feeding milk (not necessarily removal of calf from the cow).</i>

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