



SPCA CERTIFIED



STANDARDS FOR THE RAISING AND HANDLING OF

BROILER CHICKENS

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1.0 INTRODUCTION

The SPCA Certified program is an independent, third party animal welfare certification system. SPCA Certified brings stakeholders together to further common goals in farm animal welfare. Products come from farms that have been annually assessed by trained, independent Validators to SPCA Certified farm animal welfare standards. Certification is then determined by third party, independent reviewers.

The BC SPCA believes that an animal's welfare is synonymous with its quality of life and that an animals' health and psychological well-being both contribute to welfare. While we acknowledge it is not possible to prevent animals from experiencing all pain or discomfort in their lives, SPCA Certified standards strive to provide animals with the Five Freedoms, which are derived from those first described by the Farm Animal Welfare Council of the UK:

1. Freedom from hunger and thirst
2. Freedom from discomfort
3. Freedom from pain, injury and disease
4. Freedom from distress
5. Freedom to express behaviours that promote well-being

The Broiler Chicken Standard

The key components of the program for broiler chickens are:

- Space that allows birds to move freely, preen, stretch and flap wings
- Access to feed and water at all times
- Feed that does not contain antibiotics or mammalian/avian derived proteins
- Provision of a dark period to allow rest
- Monitoring and prevention of lameness
- Development, implementation and maintenance of a Flock Health Plan for chicken health management

The SPCA Certified *Standard for the Raising and Handling of Broiler Chickens* incorporates current research in animal welfare science with practical protocols developed by a Species Advisory Committee (SAC) – an expert panel of animal welfare scientists, veterinarians, and farmers – in consultation with the BC SPCA. Standards are updated and amended by the SAC as new scientific information and improved animal care practices are developed and proven to enhance animal welfare. No endorsement by SAC members or their respective organizations is implied.

How to Use the Standard

This standard meets or exceeds Canada's *Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens and Turkeys* (2016).

- a) SPCA Certified program participants must have a thorough understanding of, and adhere to, the Code of Practice and the additional requirements set out in this document.
- b) Program members are required to follow federal and provincial acts and regulations related to animal health, environmental and food safety practices.
- c) **Requirements** are **must do** practices for program participation.
- d) If a farm is not in compliance with a particular mandatory requirement, the Certification Body:
 - Expects the farmer to demonstrate how s/he intends to come into compliance via an action plan, which must be developed and implemented. The Certification Body will use this action plan to benchmark the farmer's progress on the non-compliance issue. OR
 - May, depending on the severity of and/or failure to address the non-compliance issue, opt to decertify the farm.

**Further detail on non-compliance issues can be found in the Operations Manual.*
- e) **Recommendations** provide further information and, when appropriate, outline timelines for future standard requirements.

2.0 FEED AND WATER

2.1 Space, Equipment and Systems

Requirements

- Feed and water availability must be checked daily to ensure equipment is functional and that birds are eating and drinking. This is particularly important for water when temperatures are below the freezing point. Attend to any defective equipment immediately (Code requirement, Section 3.2).
- Water systems must be designed and managed in a way that prevents flooding.
- Feeder and drinker heights must be checked daily and adjusted as necessary to accommodate bird growth.
- Anti-perch wire installed over feed or water lines must not be electrified or connected to any source of electricity.
- An emergency water supply sufficient for one day of use must be available in case of shut-off of main water supply.
- No bird must have to travel more than 4 m (13 ft) in the barn to reach a feed or water source.
- Functional feed and water space requirements are as follows:

Equipment	Average Bird Weight	
	Up to 2.0 kg (4.4 lb)	2.0-3.0 kg (4.4-6.6 lb)
Open-Sided Feed & Water Troughs	2.5 cm (1.0 in) per bird	3.8 cm (1.5 in) per bird
Single-Sided Feed & Water Troughs	5.0 cm (2.0 in) per bird	7.5 cm (3.0 in) per bird
Bell & Pan Feeders	2.0 cm (0.8 in) per bird	3.0 cm (1.2 in) per bird
33 cm (13 in) diameter pan [104 cm (41 in) circumference]	1 per 50 birds	1 per 35 birds
26 cm (10 in) diameter pan [82 cm (32 in) circumference]	1 per 40 birds	1 per 25 birds
Bell Drinkers	1 per 100 birds	1 per 65 birds
Water Nipples & Cups	1 per 10 birds	1 per 6 birds

Note: An open-sided feed or water trough provides access at both sides, which is why linear trough space required has been doubled for single-sided troughs (e.g. wall-mounted troughs).

Recommendations

- Install water meters to monitor flock water intake
- Nipple drinkers are preferred over water troughs and bell drinkers
- Water temperature at bird access points should never exceed 30°C

2.2 Feed Management and Nutrition

Requirements

- Broiler chickens must receive a diet that is nutritionally balanced (as per National Research Council (NRC) requirements or a qualified poultry nutritionist), free from contaminants, and provided in quantities that maintain health and vigor. Dietary requirements vary by genetics, age and stage of growth. Adjust rations to meet birds' changing needs.
- Test feed if bird health or behaviour is indicative of feed contamination or poor nutritional quality. Contact the manufacturer to arrange testing at specialized feed labs.

- c) Feed must be available at all times and may only be withheld upon the recommendation of a veterinarian to control specific disease conditions. See feed withdrawal pre-catching (Section 6.3) and in transit (Section 6.5).
- d) Feed must not contain mammalian or avian derived protein.
- e) The use of probiotics, enzymes, or other nutritive supplements in feed is acceptable in the program, and according to regulatory standards. (see Section 4.5 on use of pharmaceuticals in feed)
- f) Records to be kept on file and/or presented to the Validator:
 - A list of any feed supplements or additives used
 - Ingredient breakdown and “minimum guaranteed nutrient analysis” of feedstuffs for each group of birds
 - A current list of feed suppliers

Recommendations

- Avoid making abrupt changes to feed quality, form or nutritional content. Changes should be made gradually and according to recommendations provided by a nutritionist, veterinarian, or other qualified specialist.

2.3 Water Management and Hydration

Requirements

- a) Clean, palatable drinking water must be available to broiler chickens at all times and in quantities to meet their needs, including when temperatures are below the freezing point. Ice is not acceptable as a drinking water source. Limited interruptions in water supply for the purpose of vaccinations, water system maintenance, or under the direction of a veterinarian, are acceptable.
- b) Monitor water on an ongoing basis for changes that may suggest a change in quality (e.g. odours, cloudiness, rust).
- c) Test water at least once annually to ensure its suitability for broiler chickens (Code requirement, Section 4.1).
 - Take samples directly from drinking source (e.g. water nipple)
 - Test for heavy metals, ions, total dissolved solids (TDS), nitrates/nitrites, sulfates, and bacterial contamination (e.g. coliforms). Coliform testing per 100 mL must be specifically requested from the lab.
 - Water samples must not contain more than 10 total coliforms per 100 mL, and none may be fecal coliforms (e.g. E. coli)
 - Take immediate corrective action if water is determined to be unsuitable
 - Submit test results to the Validator and/or send directly to the Certification Body
- d) The administration of probiotics, enzymes, or other nutritive supplements in water is acceptable. (see Section 4.5 on use of pharmaceuticals in water)
- e) A list of any water supplements or additives used and the application guidelines (e.g. product justification, dosage and duration of treatment) must be presented to the Validator.

Recommendations

- Probiotics are best administered early in life or following an illness. Follow the label for dosage and duration of use when administering probiotics in the chickens’ drinking water. Consult your veterinarian for additional advice on probiotic use in poultry.
- Test surface water sources and wells more frequently than once annually to ensure water quality is maintained
- Aim for zero detectable coliforms per 100 mL of water and less than 500 organisms per mL of water in water samples taken from the birds’ drinking water supply
- Consult a poultry veterinarian or nutritionist for guidance on maximum acceptable contaminant levels in drinking water. The Chicken Farmers of Canada On-Farm Food Safety Assurance Program (OFFSAP) Manual also provides useful information on water testing.

3.0 ENVIRONMENT

3.1 Housing

Requirements

- a) Housing must be designed and built/renovated to ensure:
 - The comfort, hygiene and health of all birds
 - Adherence to biosecurity protocols (see Sections 4.7, 4.8)
 - Safe, efficient and humane movement in/out of the facility and to/from the transport vehicle
 - Safe, easy, and unobstructed access by transport vehicles
- b) Although uncommon in broiler chicken production, housing in cages or on wire flooring is prohibited.
- c) Birds must have access to a well-drained area for resting at all times, starting at placement.
- d) In free-range systems, barns must have exits (popholes) to allow easy access to and from pasture/range. Refer to Section 3.7 – Free-Range Production.
- e) Facilities must be prepared for bird placement in advance of receiving the birds (Code requirement, Section 6.2, 6.3). This includes being cleaned and heated with litter, feed and water ready and available.

Recommendations

- Flooring should be easy to disinfect to prevent parasites and pathogens from affecting the health of new flocks. The use of earthen floors is strongly discouraged due to the difficulty involved in disinfecting earth floors between flocks.
- Consider installing underfloor heating in new constructions as this helps to eliminate problems associated with wet litter, ammonia, and footpad and hock lesions

3.2 Space Allowances

Requirements

- a) Space must permit freedom of movement for all birds so they may stretch, preen, flap their wings, rest simultaneously, and move about the environment easily. Stocking density must not exceed the following:

	Housing ^a	Yards ^b		Pasture ^c
kg/m ²	21	21	birds/ha	2,500
lb/ft ²	4.3	4.3	birds/ac	1,000

^a Stocking density inside housing structures such as barns, shelters, and mobile units

^b Stocking density in winter gardens, outdoor runs, and exercise areas not covered in vegetation

^c Stocking density on pasture and areas seeded with vegetation

3.3 Environmental Enrichment

Environmental enrichment is a feature of a bird's social and physical environment that improves the bird's welfare beyond its most basic needs for survival. The goals of enrichment are to:

- Expand upon the number and variety of normal, positive behaviours
- Improve the birds' ability to cope with stressors
- Prevent the development, frequency and severity of abnormal behaviours
- Improve and maintain physical health by stimulating bird activity
- Enable better use of the surrounding environment

Requirements

- a) Environmental enrichment must be provided to allow birds the freedom to perform behaviours that enhance their physical and social well-being. Start providing enrichment to chickens at placement.
- b) Monitor enrichment items to ensure they don't pose a health risk to birds (e.g. poisoning, digestive issues, pathogen transfer).
- c) Wash and disinfect enrichment objects between flocks, or dispose of and replace those that cannot be sanitized.

Recommendations

- Provide pecking objects throughout the barn to stimulate bird activity. E.g. whole grain scattered throughout the litter, cabbages, straw bales, hanging wooden blocks, other novel objects.
- Allow chickens access to the outdoors when weather permits

3.3.1 Litter

Litter is an important addition to the birds' environment as it provides chickens with opportunities to perform natural, healthy behaviours, like foraging, scratching, and dust bathing. However, if not managed properly, litter quality will deteriorate and can lead to increased incidence and severity of hock burns, breast blisters and foot pad lesions. Wet litter increases ammonia levels in the air, which can lead to respiratory problems and promotes outbreaks of coccidiosis. Therefore, it is important that litter be maintained in good condition and replaced or topped up when necessary.

Requirements

- a) Birds must have access to well-maintained litter area at all times, starting at placement.
- b) The litter area must make up a minimum of:
 - 50% of the floor space in free-run systems
 - 30% of the indoor floor space in free-range systems
- c) The litter must:
 - Be of a suitable material that is non-toxic and absorbent
 - Be of a suitable particle size, devoid of large clumps
 - Be introduced and maintained in a dry, friable condition
 - Be an average minimum depth of 5 cm (2 inches)
 - Allow chickens to dust bathe
 - Be replaced or topped up when the above conditions are not met

Recommendations

- Wood shavings are the preferred litter substrate for broiler chickens
- Monitor litter around feeders and waterers closely, as it is often wetter there than elsewhere in the barn
- Remove caked litter promptly

3.3.2 Perches

Perching on raised objects is a natural behaviour for poultry and it holds evolutionary importance. In nature, elevated perches enable birds to watch over the flock for approaching predators or other dangers, as well as remove themselves from potential dangers on the ground. This behaviour is still important to modern commercial broiler chickens; however, some strains have been genetically selected to grow very large breast muscles, and their legs may be physically incapable of supporting their full body weight for long periods of time, especially on narrow perches. Providing objects at varying low heights allows heavy birds to continue to access perches easily and without injury. Providing wide perches permits support for the legs and body of the bird.

Requirements

- a) Perching objects must be provided to broiler chickens:
 - A minimum of 2 m (6.6 ft) horizontal perch space per 1,000 birds must be provided at all times; replenish objects that deteriorate over time (e.g. straw bales)
 - Due to the physical conformation and related limitations of broiler chickens, position perches at varying low heights: 8-30 cm (3-12 inches); Note: this may be increased up to 36 or 41 cm (14 or 16 inches) to accommodate 2- and 3-string bale sizes, respectively
- b) Use wide objects for perching, such as straw bales, blocks and bricks.
- c) Spread perches throughout the indoor area.
- d) Perches must not be of a material that would be harmful if ingested, as birds may peck at them.

3.4 Lighting

Light intensity, wavelength and duration are each of importance in the production of poultry. Chickens perform better and are healthier when they have distinct light and dark periods of appropriate light intensities.

When with the hen, chicks are brooded for approximately 8 hours during the night, and intermittently throughout the day to allow for wakeful periods to feed and drink between bouts of rest and sleep. In commercial settings, having regular light and dark periods simulates brooding and allows chicks to synchronize their behaviours. They are able to develop day time activity periods (e.g. feeding, drinking) that are distinct from night time resting/sleeping periods.

A sufficient light intensity is important in allowing newly placed chicks to familiarize themselves with their environment and the location of resources such as feed and water. Birds are sensitive to a wider light spectrum than humans, and research indicates they prefer brighter lighting that is richer in UV wavelengths, especially during activities such as feeding. When lighting is insufficient during the wakeful period, birds cannot see properly and have difficulty (or become injured) locating feeders, waterers, perches, etc. This can negatively impact health and welfare.

Dark periods are of paramount importance to most young animals, including chicks, for resting and sleeping. When the light period is too long or the dark period is not dark enough, activity and rest periods are not synchronized, and chicks who are trying to sleep are constantly being disturbed by those who are moving to the feeder.

Feeding activity is highest immediately after the lights come on and shortly before they turn off. Dawn-dusk lighting programs allow for gradual increase and decrease of light intensity in the morning and evening, respectively, which reduces bird density at the feeder and reduces the number of scratches and cellulitis as a result.

Requirements

- a) During daylight hours, indoor lighting must be either:
 - Full spectrum lighting (i.e. daylight simulating bulbs); or
 - Natural lighting (e.g. via evenly distributed windows, doors, and/or skylights, or open-sided barns, light-permeable fabric, etc.). The areas that permit entry of natural light must make up no less than 1% of the total ground-floor area unless it can be demonstrated that natural light levels are, at minimum, 20 lux anywhere in the barn.

If renovation of barns on existing operations is needed in order to comply with this requirement, operators are granted a period of up to 3 years to install full spectrum lighting and up to 10 years to install natural lighting sources from the date of publication of this standard to come into compliance, provided that a renovation plan is in place and has been submitted to the Certification Body within 12 months after the publication of this standard.
- b) Indoor light intensity must be:
 - A minimum of 20 lux during daylight hours, as measured at bird height

- Below 0.5 lux at night, as measured at bird height (use brooders that do not emit light)
 - Adjustable to simulate dawn and dusk periods, and to allow for assessment of the flock and facilities at night, if needed (for non-electrified housing, portable lighting of sufficient lux for assessment of flocks at night are acceptable; e.g. gas lamps, flashlights)
- c) At least 8 hours of light and 8 hours of darkness must be provided in a 24-hour period, starting at placement.
- The “night time” period must be a minimum of 6 consecutive hours of darkness to allow an adequate rest period
 - Intermittent lighting during the “daytime” period is acceptable for newly placed chicks, to simulate brooding
- d) Lighting program details must be made available to the Validator during assessments.
- e) Light control systems must be inspected regularly and maintained in working order (Code requirement, Section 3.4).

Recommendations

- When indoor lighting is automated, program the system to provide a 30-minute period of dim light (4-5 lux) just before the lights are turned on or off to simulate dawn and dusk periods
- If lighting is not automated, turn banks of lights on (morning) or off (evening) in sequence, timed a few minutes apart, to simulate dawn and dusk periods
- To achieve optimal lighting intensity, ensure bulbs are evenly placed, working, clean, and of the same wattage, and ensure that shadows are cast only where they are needed
- Consider installing light sensors in barns to automatically turn lights on/off when needed, thus ensuring the minimum 20 lux is achieved at all times during the light period

3.5 Temperature

The behaviour of chickens can be used as an indicator of thermal comfort. A temperature close to optimal is present when the chickens are evenly distributed throughout the barn. The following behavioural signs may indicate thermal discomfort:

Too hot:

- Crowding at the perimeter of the heating zone
- Panting
- Frequent spreading of the wings
- Lying flat out
- Pasty excreta on the cloacal area
- Decreased feeding behaviour

Too cold:

- Crowding in close proximity to the heat source
- Huddling
- Feather ruffling
- Rigid posture
- Trembling
- Piling of birds on top of one another
- Distressed vocalizations

Requirements

- a) Birds must have access to a thermally comfortable environment. Ensure the following indoor temperatures are achieved and take corrective action if birds show signs of being too hot or too cold:

Age of Bird	Optimal Temperatures
Under 1 week	30-34 °C (86-93 °F)
1-5 weeks	Reduce by 2-3 °C (4-6 °F) weekly
6 weeks on	18-24 °C (65-75 °F)

- b) Record daily minimum and maximum barn temperatures, taken at bird height. Make these records available to the Validator.

- c) Heating systems must be inspected regularly and maintained in working order (Code requirement, Section 3.3.1).

3.6 Ventilation and Air Quality

Air quality and ventilation rates are closely linked. Proper ventilation allows exhaustion of airborne contaminants to the barn's exterior. However, if not monitored and managed properly, airborne contaminants may increase and can negatively impact bird health. For example, aerial ammonia levels can cause decreased respiratory health, impaired growth, reduced feed intake, and lesions, ulcers and inflammation in the eyes of poultry.

Requirements

- a) Ventilation systems must be inspected regularly and maintained in working order (Code requirement, Section 3.3.1).
- b) Ventilation must be managed in a way that will ensure:
- Proper circulation of fresh air throughout the birds' indoor environment
 - Exhaustion of aerial contaminants (e.g. dust and gases) to the barn's exterior
 - Uniform air movement throughout the barn, minimizing drafts
 - Properly maintained humidity levels (target 50-70%)
- c) Aerial ammonia:
- Must not exceed 20 ppm or remedial action is required
 - Must be measured in barns at bird height and recorded weekly – use automated equipment or litmus paper testing kits (kits available through the Certification Body)
 - Records must be made available to the Validator
- d) Gas-powered equipment must not be used near the barn's air inlets as carbon monoxide (CO) containing exhaust fumes entering the barn may be fatal to chickens and humans.

Recommendations

Monitor the following aerial contaminant levels and aim to ensure they remain below the recommended maximums:

Aerial Ammonia (NH ₃)	ideally maintained below 10ppm
Hydrogen Sulfide (H ₂ S)	should not exceed 2.5 ppm
Carbon Dioxide (CO ₂)	should not exceed 3,000 ppm
Carbon Monoxide (CO)	should not exceed 50 ppm
Dust	should not exceed 5 mg/m ³ respirable dust, or 10 mg/m ³ total dust

3.7 Free-Range Production

Although encouraged, especially during good weather, outdoor access (i.e. free-range production) is not a requirement of this Standard. Access to the outdoors, especially a pasture area, can be very enriching to poultry (see Section 3.3 – Environmental Enrichment). However, in much of Canada, seasonal weather conditions can be severe. This section applies to those producers raising and marketing free-range and pastured broiler chickens (including organic).

Requirements

- a) Weather permitting, broiler chickens labelled as free-range must have access to the outdoors:
- From at least 4 weeks (28 days) of age, or earlier if they are already fully feathered or the weather is ideal
 - For at least 8 hours per day, unless the period of natural daylight is less
- b) Access to the outdoors may be restricted if:
- There is an imminent threat to the health or welfare of the birds
 - Ordered indoors by government officials (e.g. for disease control purposes)

- Periods of restriction and reason are documented
- c) Barns must have popholes (i.e. exits) that allow birds easy access to and from the outdoors. Popholes must be:
 - A minimum vertical height: 45 cm (18 in)
 - A minimum horizontal length: 100 cm (39 in)
 - A minimum allocation: 1 pophole per 600 birds
 - Evenly distributed along the range access side(s) of the barn
- d) When barns do not meet the above pophole requirements, either the distance to a pophole from anywhere in the barn must be no more than 15 m (49 ft), or the producer must provide evidence that:
 - Pophole size is such that chickens are able to enter/exit the barn with ease, and
 - At least 25% of birds are using the range when there are no age or weather constraints
- e) Free-range producers must have the ability to provide adequate indoor housing conditions, as required by this Standard, to keep their birds indoors throughout the production cycle if necessitated due to government orders for disease control.

3.7.1 Outdoor Environment

Requirements

- a) The outdoor area must be:
 - Free of debris that may shelter nuisance animals, such as rodents
 - Well drained, including under and around feeders and waterers
 - Managed according to environmentally sound practices and any government regulations applicable to agricultural wastes, manure spreading, fertilizer application, pesticide use and herbicide use
- b) Stocking density:
 - Must comply with Section 3.2 – Space Allowance
 - Must not exceed the pasture’s ability to maintain forage
- c) Rotate range areas to allow time for regrowth when needed.
- d) Provide feed and water in a way that discourages or prevents access by wild birds (Code requirement, Section 3.8), rodents and scavengers.
- e) Chickens must be protected from both ground and avian predators through the use of:
 - Fencing
 - Overhead cover (e.g. trees, netting, man-made structures)
- f) Shade and shelter is required for all operations providing outdoor access, and must be sufficient to accommodate the size of the flock (Code requirement, Section 3.8).

Recommendations

- The majority of the outdoor area should be covered in vegetation, seeded if necessary, and periodically left empty to allow vegetation to re-grow and to prevent disease build-up
- Avoid using outdoor areas prone to flooding, containing large bodies of standing water, or having stony or heavy soils as chicken range areas
- Ideally, perimeter fencing should extend into the ground to prevent predators from burrowing underneath to enter range areas
- Move mobile shelters every 4 days, or more often, if possible

4.0 HEALTH AND BIOSECURITY

4.1 Veterinary Client/Patient Relationship

Establishing a Veterinary Client/Patient Relationship (VCPR), in addition to developing a flock health plan (see Section 4.2), is critical to maintaining the health and welfare of the flock. A VCPR is in place when the veterinarian assumes responsibility for making clinical judgments about the health of the birds and the need for medical treatment, and the client agrees to follow the veterinarian's instructions. Additionally, the veterinarian has enough knowledge of the birds to, at minimum, initiate a general or preliminary diagnosis of the medical condition of the birds. This means the veterinarian will have recently seen the flock and is personally familiar with its keeping and care by virtue of an examination or by medically appropriate and timely visits to the facilities where the birds are kept.

Requirements

- a) Producers must establish a VCPR with a licensed poultry veterinarian. In areas where a practicing poultry veterinarian is unavailable, the Certification Body may permit a VCPR with a licensed veterinarian experienced with other farm animal species.

4.2 Flock Health Plans

The health status of a flock is a significant factor in the welfare of the birds. Accordingly, developing a Flock Health Plan is vital to maintaining bird health and welfare. The main goals of a Flock Health Plan are to prevent disease and to minimize mortality, illness, and injury over time. As such, the principal components of the Flock Health Plan are:

- Identification of potential health challenges and disease risks
- An outline of the management practices that prevent potential disease and injury
- Annual updates intended to strengthen the plan by addressing past health and welfare concerns
- Attentive record keeping of flock health measures
- Correspondence between the manager, the veterinarian, and the Certification Body on all significant animal health matters

Requirements

- a) A written Flock Health Plan must be developed and implemented by the farm owner or manager, and submitted to the Certification Body for review as part of the farm's application for membership in the program.
- b) The Flock Health Plan must be reviewed and updated by the farm owner or manager:
 - Annually
 - After any major health incident (e.g. disease outbreak)
 - After any significant change to the production system has been made (e.g. introduction of new species to the farm, facility changes)
- c) Familiarize stockpeople with the Flock Health Plan.

Recommendations

- Consult your veterinarian for assistance with development and revision of the Flock Health Plan
- The Certification Body has developed a template Flock Health Plan that is available to farmers as a resource (via the web portal). Farmers may opt to submit their own plan provided the information it contains covers that requested in the Certification Body's Flock Health Plan template.

4.3 Monitoring Flock Health

Requirements

- a) Unless otherwise specified, flocks must be inspected twice daily for injuries, illnesses, diseases, physical and behavioural abnormalities/problems, and the presence of dead birds.
 - Have stockpersons approach within 3 meters (10 feet) of every bird, encouraging the birds to move in order to identify sick or injured birds
 - Remove dead birds immediately
- b) Investigate recurrent and flock-wide health and behavioural problems in order to identify the cause and enact a solution. Consult your veterinarian to conduct a diagnostic investigation and assist with a plan to resolve the problem if needed.
 - Diagnostic records must be kept on file at the farm and a copy sent to the Certification Body as part of the Flock Health Plan
 - Diagnostic testing for various diseases or parasites, which may include blood sampling and/or necropsies, may be requested by the Certification Body
- c) Instances of reportable diseases or suspicion of such diseases among the flock must be brought to the attention of a provincial or federal veterinarian.
 - A current list of federally reportable diseases in poultry can be found on the Canadian Food Inspection Agency website or in the Reportable Diseases Regulations under the Health of Animals Act (see Appendix F – References)
 - Consult with your provincial Ministry of Agriculture for a list of provincially reportable diseases (in British Columbia, this list can be found in the Animal Health Act or on the BC Ministry of Agriculture website)

Recommendations

- Inspect flocks 2-4 times daily during the first week after chick placement, with special attention given to increases in huddling, piling, inactivity, and early mortality. After the first week, twice daily flock inspections are usually sufficient.
- Example issues to look for during flock inspections include: Pendulous crop, poor body condition, poor feather condition or coverage, lameness, physical injuries, parasites (internal and external), infectious diseases, metabolic diseases (e.g. ascites), abnormal respiratory sounds or open mouth breathing, abnormal behaviour and behavioural problems

4.4 Managing Sick and Injured Birds

Requirements

- a) Sick and injured birds must be treated or euthanized without delay.
- b) Areas (e.g. hospital pens) must be provided to segregate birds being treated.
- c) Birds in segregation must be monitored at least 3-4 times daily so they can be assessed for continued recovery, or euthanized (Code requirement, Section 8.2).
- d) Keep a treatment log outlining reason for treatment, treatment method used, method of bird identification (e.g. leg band colour/number), and medication withdrawal time, if applicable (see Section 4.5 – Medications and Vaccines).
- e) Lameness will be assessed by Validators using the lameness scoring protocol described in Appendix B. Lameness scores must not exceed the following thresholds at time of inspection:

Lameness Score	Maximum Prevalence
3	10 %
4	0.1 %
5	0.0 %

- f) Birds with a lameness score of 3 or higher must be treated promptly or euthanized by an acceptable method (per Section 7.0). Those not responding to treatment must be euthanized.
- g) Control cannibalism by removing injured birds as soon as they are identified. In the event of an outbreak, contact your veterinarian to discuss possible measures for remediation.

Recommendations

Although not as common as in turkey or layer flocks, behaviours such as feather pecking and cannibalism may become a problem in some broiler chicken flocks. Factors affecting this behaviour include genetics (choice of strain or breed), quality and intensity of light, flock/group size, stocking density, changes in feed provision or nutrition, and environmental changes (weather, noise levels, etc.), to name a few. To prevent problematic pecking behaviour, consider:

- Removing overly aggressive birds
- Providing enrichment in the form of pecking objects (see Section 3.3 – Environmental enrichment)
- Housing chickens in smaller social groups
- Increasing space provided per bird
- Choosing a different breed/strain of chicken
- Ensuring feed is available to all birds at all times
- Making changes to feed gradually
- Ensuring diet is not nutrient deficient
- Dimming the lights or using red lighting for a short time as a last resort, if other methods have failed to resolve the problem

Score birds for lameness weekly according to the protocols described in Appendix B. Keep scoring records on file. To reduce the occurrence of lameness in poultry flocks, consider:

- Using a lighting program that provides sufficient periods of darkness
- Ensuring the birds receive proper nutrition according to their stage of production. This consists of a diet that has an appropriate balance of vitamins and minerals as well as a balance of essential amino acids.
- Stimulating activity by walking through the barn more often or by enriching the birds' environment with woodblocks, hay bales, or low perches

4.5 Medications and Vaccines

Requirements

- a) Flocks must be vaccinated as appropriate to each farm and according to the veterinarian's recommendations. Consult with a veterinarian on what vaccinations are appropriate.
- b) The administration of antibiotics to chickens (in feed, water, or to individual birds) is only permitted as prescribed by a licensed poultry veterinarian for the treatment of birds with existing injuries or disease. Antibiotics are prohibited from use on healthy birds, as growth promotants, or as performance enhancers.
- c) Prior to administering homeopathic remedies as the sole method of treatment for pain, an injury, or a disease, ensure the remedy has been proven effective in scientific trials for the use intended.
 - The Certification Body is supportive of the use of homeopathics on broiler chickens to treat illnesses and injuries, and to manage pain, provided there is peer reviewed scientific evidence documenting the use and success of the remedy in chicken production. In the absence of such evidence, the Certification Body cannot accept homeopathics as the sole method of pain control or treatment for illnesses and injuries.
- d) Complete and accurate records must be kept of all vaccines, drugs and treatments used, including homeopathic medicines. Withdrawal times must be recorded, closely monitored, and adhered to. These records, as well as a record of all veterinary prescriptions, must be provided to the Validator during assessments.

4.6 Culls and Mortalities

Requirements

- a) All culls, mortalities and causes (if known) must be recorded daily (Code requirement, Section 5.3.1). These records must be made available to the Validator.
- b) The following table outlines maximum mortality thresholds (including culls) at any given time:

Age (days)	Maximum Prevalence (%)
7	1.4
14	1.8
21	2.3
28	2.7
35	3.1
42	3.5
49	3.9
56	4.4
<i>Maximum prevalence above = 1 + (0.06 x age in days)</i>	
<i>Basing maximum flock mortality on this equation accommodates increased mortality rates for flocks slaughtered at older ages</i>	
24-hour period	0.5 % of flock
Due to lameness or leg abnormalities	60 % of all mortalities & culls
Transport DOA's	0.2 % per flock

Numbers include birds that die naturally, are culled from the flock, or are euthanized on farm. DOA (dead-on-arrival) numbers reflect birds that die in transit (see Section 6.5 – Transport Conditions).

- c) If the above thresholds are exceeded, consult your veterinarian and initiate a diagnostic investigation. If exceeded for two successive cycles, a veterinary site visit is required. A copy of the veterinarian's report, including causes and suggested strategies to prevent or minimize recurrence, must be submitted to the Certification Body.
- d) Send suspicious mortalities for diagnostic testing.

4.7 Biosecurity Plans

The purpose of biosecurity planning is to protect the flock from the introduction and spread of diseases. An effective program encompasses two main concepts:

- Exclusion, i.e. keeping diseases out of the flock
- Containment, i.e. preventing the spread of diseases

Requirements

- a) A written Biosecurity Plan must be developed and implemented by the farm owner or manager, and submitted to the Certification Body for review as part of the farm's application for membership in the program.

- b) The Biosecurity Plan must be reviewed and updated by the farm owner or manager:
 - Annually
 - After any major health incident (e.g. disease outbreak)
 - After any significant change to the production system has been made (e.g. introduction of new species to the farm, facility changes)
- c) Familiarize stockpeople with the Biosecurity Plan.

Recommendations

- Develop the Biosecurity Plan using an industry-approved program, such as the BC Poultry Biosecurity Program, or with the assistance of a licensed veterinarian
- The Certification Body has developed a template biosecurity plan that is available as a resource via the web portal. Farmers may opt to develop their own plan provided it addresses, at minimum, the information requested in the Certification Body's template.

4.8 Biosecurity and Sanitation Protocols

Requirements

- a) An all-in/all-out system must be used to restock each flock. Mixing new stock with the home flock is prohibited.
- b) Each flock must be of a single type (species and age). Flocks of different species or ages must be isolated from each other with appropriate biosecurity measures, as identified in the Biosecurity Plan.
- c) Feeding and watering equipment must be flushed out between flocks. Clean and sanitize bins and equipment if they previously contained feed or water with prohibited ingredients.
- d) Barns and permanent fixtures must be cleaned and disinfected between flocks.
- e) Remove and dispose of all used litter and disposable enrichment items used during the growing period.
- f) All by-products such as manure, litter and carcasses must be managed and disposed of in accordance with relevant local, provincial and federal government regulations (or recommendations where regulations do not exist), including the provincial Poultry Biosecurity Program guidelines for mortality handling. Disposal and containment must be managed in such a way that chickens, predators and nuisance animals do not have access.
- g) All farm visitors must:
 - Be recorded in a log to assist in on-farm disease tracking and control. At minimum, the log must indicate the date and time of visit, as well as when the visitor's last contact with another poultry farm occurred.
 - Wear appropriate footwear and clothing on site (e.g. clean cover-alls, plastic booties or disinfected rubber boots, etc.)
 - Have access to foot dips (or boot sanitation stations) and hand sanitizers (or hand wash stations) at each barn to avoid cross-contamination, especially if different breeds, species, ages, or sources of poultry are located on the same site
 - Follow any other biosecurity protocols specified by the farm owner and outlined in the farm's Biosecurity Plan
- h) It is the farm owner's responsibility to ensure all farm visitors (including Validators) adhere to biosecurity protocols.

Recommendations

- Source all new birds from sources of known health status where high management and sanitation practices are in place (e.g. licensed brokers and government-registered hatcheries)
- Plan barn orientation, barn spacing, and ventilation systems in a way that will avoid contamination of one barn with exhaust from another
- Ensure all farm visitors are free from contact with other poultry for at least 24 hours prior to their visit
- Have a self-quarantine protocol in place and include it in the written Biosecurity Plan

4.9 Nuisance Animal Control

Mingling of broiler chickens with other animals poses potential biosecurity risks, and poses risks to the health and welfare of the chickens. As with all nuisance animals, prevention of access to the premises (i.e. exclusion) is of primary importance.

Requirements

- a) Monitor facilities for signs of rodent, wild bird and insect infestations at least once monthly.
- b) Control fly and insect populations in indoor and outdoor settings.
 - Fly paper and zap traps are acceptable
 - Take steps to locate and eliminate potential insect breeding areas
- c) Only the least harmful methods of rodent control may be used to protect poultry from rodents in the barn. Firstly, take steps to exclude rodents from the premises:
 - Eliminate clutter inside or around the facility
 - Ensure feed storage containers and bins are rodent proof
 - Ensure other structures (e.g. storage facilities for litter, etc.) are kept dry and inaccessible
 - Familiarize stockpeople with places rodents prefer to take shelter and take steps to eliminate or reduce those areas
- d) If rodent access to the barn is achieved, a method of lethal control may be chosen to resolve the issue:
 - Quick-kill snap traps (preferred over rodenticides): Traps must be checked daily. Rodents found alive and injured by traps must be promptly euthanized. Ineffective traps must be replaced.
 - Rodenticides: May only be used to control severe outbreaks, and may only be applied using bait stations that are managed according to Health Canada's PMRA regulations
 - Prohibited methods: Methods of lethal rodent control that prolong suffering, either due to the method itself or because the method is ineffective, are unacceptable, as are those that endanger other animals. Therefore, the use of glue boards, electrocution, drowning, live freezing/hypothermia, and traps that cause death by starvation are strictly prohibited.
- e) Traps, nets, and screens used to prevent access of wild birds to the barn must be checked daily. Birds found caught in the net may be freed if they are healthy. Birds found alive and injured by traps must be promptly euthanized.
- f) Poultry must be protected from predators and any other nuisance animals not covered above, firstly by methods of exclusion (e.g. overhead cover, perimeter fencing) and methods that do not cause pain and suffering (e.g. use of guardian animals).
- g) Any guardian animals (e.g. dogs) used to protect the flock must be given care suitable to maintain good health and welfare. This includes access to feed and water, grooming for the purpose of maintaining good health (e.g. nail or hair trimming when necessary), and veterinary care that includes parasite control and the monitoring and treatment of injuries and illnesses.
- h) Guardian animals must be provided with retirement plans (e.g. re-homing options) at the end of their working career. If euthanasia is required due to declining health, for example, it must be carried out by a veterinarian. Killing of healthy guardian animals for owner convenience is prohibited.

Recommendations

- To ensure a prompt death, euthanize live and injured rodents found in traps using manually applied blunt force trauma to the head followed by immediate use of a secondary method such as cervical dislocation (mice only), decapitation, exsanguination (bleeding out) or CO₂
- To ensure live, injured nuisance birds found trapped in nets receive a prompt death, euthanize them using any of the following methods:
 - Shot to the head
 - Captive bolt followed by immediate use of a secondary method (e.g. cervical dislocation, decapitation, exsanguination (bleeding out) or CO₂)
 - Birds under 100g: Cervical dislocation by a trained individual followed by immediate use of a secondary method (e.g. decapitation, exsanguination (bleeding out) or CO₂)
 - Birds 100-250g: Manually applied blunt force trauma to the head followed by immediate use of a secondary method (e.g. decapitation, cervical dislocation, exsanguination (bleeding out) or CO₂)

- CO or CO₂ from a pure gas cylinder delivered into a gas chamber with a regulator to achieve over 40% concentration

5.0 MANAGEMENT

5.1 Record Keeping

Requirements

- a) All farm records must be kept up to date (see Appendix A).
- b) Upon obtaining certification, Members will be expected to retain all records between one Annual Assessment and the next (minimum 3 years).

Recommendations

- Template record keeping forms are available from the Certification Body upon request or via the online web portal. It is acceptable to use record keeping forms from industry programs or those that have already been developed for the operation. Applicants that do not have a consistent record keeping system are encouraged to use and implement the Certification Program forms.

5.2 Staff Knowledge and Training

Requirements

- a) All staff with responsibility for the flock must have access to a copy of and be familiar with the SPCA *Certified Standards for the Raising and Handling of Broiler Chickens* and the *Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens and Turkeys* (2016).
- b) A written Code of Conduct that covers bird welfare must be developed and communicated to farm staff (Code requirement, Section 1).
- c) Prior to being charged with care of the flock, all stockpeople must be trained in, and knowledgeable of:
 - Biological and behavioural needs of chickens
 - Normal and abnormal chicken behaviours
 - Common illnesses/diseases of chickens
 - How to care for sick or injured chickens
 - Low-stress chicken handling methods
 - Skills in performing common chicken husbandry procedures
 - Methods of humane euthanasia
- d) An on-farm training program must equip farm staff with knowledge and skills essential to perform their job and provide access to new information on animal husbandry methods and welfare issues.

Recommendations

- See Appendix A of the *Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens and Turkeys* (2016) for a sample 'Bird Welfare Policy' that can be used as part of the farm's written Code of Conduct

5.3 Physical Alterations

Requirements

- a) Trimming of wing feathers is permitted.
- b) Beak trimming is prohibited, as is application and use of spectacles, goggles, blinkers, and the like to prevent feather pecking. Producers must attempt to use non-invasive methods to prevent and control problematic pecking behaviour (see Section 4.4 – Managing Sick and Injured Birds).
- c) All other physical alterations are prohibited, such as:
 - Caponization (removal of the testes of male birds)
 - Toe trimming, de-toeing, de-clawing, de-spurring
 - Comb or wattle trimming, dubbing
 - Hole-punching (punching a hole between the toes as a method of identification)

- Pinioning, de-winging (surgically removing the joint of a bird's wing farthest from the body to prevent flight)

The Certification Body understands that most of these practices are not generally performed in the production of broiler chickens in Canada, and prohibits them as a precautionary measure.

5.4 Bird Identification

Requirements

- a) Where identification is required, it must not cause harm to the bird.
- b) Expandable leg bands designed for use on chickens are acceptable for identifying individual birds.
- c) Although not commonly practiced in broiler chicken production in Canada, hole-punching (punching a hole between the toes) as a method of identification is prohibited.

5.5 Purchase and Sale of Chickens

At this time, Standards have not been developed for broiler breeding facilities or hatcheries. Until Standards have been developed for these facilities, replacement chicks need not be from a source approved by the Program, with the understanding that approved hatcheries will be required in the future.

The program discourages the use of auctions/markets (including online) for purchasing and/or selling poultry. However, it is understood that some small flock owners use such outlets to source birds.

Requirements

- a) The following documentation (to be kept on file) is required for each bird purchased at auctions/markets:
 - Farm of origin documentation
 - A complete history, including movement and transportation records, documenting previous owner(s) and farm(s) names

Note: When purchasing birds, ensure compliance with Section 4.8 (a,b) regarding mixing of stock, flock age and flock type.
- b) Other required records include:
 - Breeds and population size of all flocks
 - Sources of all purchases and sales of birds (a complete audit trail from farm to final sale)
 - Year-end inventories of birds

Recommendations

- Source birds from licensed brokers and/or government-registered hatcheries where health status is known and management and sanitation practices are stringent and verifiable

5.6 Emergency Preparedness

Requirements

- a) An emergency plan for reasonably foreseeable emergencies that would impact bird welfare must be prepared and reviewed with all farm personnel (Code requirement, Section 5.4). The emergency plan must cover procedures to be followed in the event of a natural disaster, power outage, or mechanical failure, and is especially important for ventilation, heating, feeding and watering.
- b) An emergency backup system (i.e. a backup generator or alternate equipment to be used during a power failure) must be in place for use during a power outage to ensure bird welfare. This system must be tested regularly (Code requirement, Section 5.4).
- c) Develop and follow an ongoing facility/equipment maintenance and testing program so that all alarms, fail-safe devices, equipment and facilities are inspected at regular intervals and defects or malfunctions

are corrected in a timely manner. All fire prevention and detection devices must be tested and serviced as recommended by the manufacturer.

- d) Ensure waste storage facilities are maintained in a way that prevents groundwater and stream contamination, or other such environmental disasters, in the event of flooding.
- e) At least one responsible person must be available at all times to take action in the event of an emergency, and all emergency contact information must be readily available to personnel (Code requirement, Section 5.4).

Recommendations

- Post a map of the farm illustrating all areas (indoor and outdoor), exits, emergency equipment and evacuation routes to assist farm staff in preparing for emergencies
- Make use of the sample 'Emergency Contact Template' available in Appendix G of the *Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys* (2016)

6.0 TRANSPORTATION

6.1 Training and Preparation Pre-Transport

The Certification Body will be phasing in a requirement that only haulers who hold certification for poultry transport from an approved training course undertake the transportation of broiler chickens. At this time, producers must ensure that haulers transport birds according to the standards, understanding that approved haulers will be required in the future.

Requirements

- a) Haulers must have a Standard Operating Procedure (SOP) and Emergency Protocol for transportation. It must be provided to the Validator upon request. At a minimum, the SOP and Emergency Protocol must outline how the requirements in Section 6.0 are met.
 - If the hauler holds certification in a poultry transport training program, verification of this training (e.g. copy of current certificate) will be accepted in lieu of the SOP
- b) Personnel involved in transport and handling of birds are expected to have access to, and adhere to:
 - Provincial and federal animal transport regulations, including the federal *Health of Animals Act*, which regulates humane handling and transport of animals (see specifically the Health of Animals Regulations, Part XII Transportation of Animals, available through the Canadian Food Inspection Agency)
 - The *Code of Practice for the Care and Handling of Farm Animals – Transportation*, available through the National Farm Animal Care Council
 - The SPCA Certified *Standard for the Raising and Handling of Broiler Chickens*
 - The hauler's Standard Operating Procedure and Emergency Protocol, as approved by the Certification Body
- c) Define the role and responsibilities of each stockperson and the hauler prior to loading or unloading birds. Stockpeople involved in arranging transport of birds need to know the trip duration, intermediate stops (e.g. rest stops), and whether the hauler must provide additional services such as feed, water and rest during the trip.

Recommendations

- Have required paperwork (e.g. bills of lading, manifests, flock health records, etc.) completed prior to loading so the hauler can leave immediately after loading the birds
- Schedule transport so that birds can be unloaded promptly upon arrival to their destination

6.2 Fitness of Chickens for Transport

Requirements

- a) Evaluate individual birds' fitness for transport in the context of each trip, with consideration of factors like weather and total trip duration. Birds too sick or injured to be transported must be treated immediately or euthanized on site.
 - See Section 4.4 – Managing Sick and Injured Birds
 - See Section 7.0 – Euthanasia
 - See Appendix C – Decision Tree: Should This Bird Be Loaded?
 - See Appendix D – Temperature-Humidity Index
- b) Chickens that have not completely withdrawn from a previous treatment with medication (i.e. the treatment withdrawal period has not lapsed) must not be shipped off the farm.
- c) Do not load wet birds in cold weather if there is any risk they will become chilled (Code requirement, Section 7.1).

6.3 Catching

Care in performing catching and loading must not be sacrificed for speed of performing the job.

Requirements

- a) Feed and water must be made available to chickens until the time of catching (Code requirement, Section 4.1).
 - The Certification Body is aware that poultry processors require birds to undergo a period of feed withdrawal pre-slaughter in order to limit gut fill at processing. In cases where producers live only a short distance from their poultry processor, they must ensure their birds do not go without feed for longer than 12 hours before slaughter.
- b) The catching area must be safe for birds and personnel; e.g. lift or remove feeders and waterers before catching (Code requirement, Section 7.3).
- c) Precautions must be taken to minimize noise levels from personnel or equipment during the catching and loading process.
- d) Unless using mechanical catchers, barn lights must be dimmed as much as possible while still allowing catchers to see the birds (e.g. 0.5 lux), and to reduce fear associated behaviours among the birds. If light intensity cannot be reduced, catching must be conducted after dark.
- e) Catchers must move among the birds in a manner that prevents crowding or piling. If birds become crowded or piled, catching procedures must be stopped and lighting intensity increased until the birds calm down and spread out in the barn.
- f) Chickens must be caught, handled and released with care and in a manner that imposes the least possible stress on the birds.
 - Best: Hold the chicken upright with one hand supporting the bird's breast, one leg between the 1st and 2nd fingers of the support hand, and the other leg between the 2nd and 3rd fingers of the support hand. Place the other hand on the bird's back to prevent its wings from flapping.
 - Acceptable: Hold the chicken upside-down by both legs; no more than 2 birds per hand
 - Unacceptable: Caught/carried by a single leg; carrying more than 2 birds per hand; carrying birds by the head, neck, wing or tail feathers (Code requirement, Section 6.1, 7.3)
 - Release: Set the chicken down on its feet or release it from a low height that enables it to land normally, feet first. Avoid releasing in a way that requires a chicken to fly.
- g) Catching crews must be supervised by competent farm personnel who are readily available to provide assistance throughout the catching and loading process if needed (Code requirement, Section 7.3).
- h) All injuries and deaths occurring during catching and loading must be recorded. A copy of this record must be kept on the farm and made available to the Validator.

Recommendations

- Use blue lighting during catching, if possible
- Use temporary partitions to avoid crowding and piling
- Avoid passing birds among handlers

6.4 Loading

Requirements

- a) When using transport containers, place birds in containers while inside the barn, and place the containers as close as possible to the birds so that every effort can be made to minimize the duration of the time the bird is held, especially if held upside-down.
- b) After being loaded into transport containers:
 - Chickens must be upright
 - All chickens must be able to rest on the floor at the same time when evenly distributed
 - No part of the chicken can protrude from the container in any way that is likely to cause injury to the bird or impede its movement
 - Containers must be handled and moved gently, and securely positioned on the transport vehicle

(Code requirements, Section 7.3)

- c) Conveyors used for loading bird containers onto the transport vehicle must not tilt them and cause birds to pile up (Code requirement, Section 7.4).
- d) Check the transport vehicle and loading area for loose birds before the vehicle moves.

6.5 Transport Conditions

Requirements

- a) Birds must not go without feed for more than 12 hours. Time in transit should be such that the birds reach their final destination no more than 12 hours after they are caught and loaded onto the transport vehicle.
- b) Overcrowding during transport can lead to increased stress, injury and mortality. Acceptable transport densities are as follows:
 - Ideal weather (see Appendix D – Temperature-Humidity Index):
 - 57 kg/m² (351cm² per 2 kg bird); or
 - 20 birds per standard transport tray measuring 1.11m x 0.71m
 - When temperatures exceed 25°C (77°F):
 - Transport chickens at night; or
 - Transport chickens during a cooler part of the day; or
 - Transport chickens at a 20% lower density (no more than 46 kg/m²)
- c) Measures must be taken to shelter birds from unfavourable environmental conditions (e.g. excessive wind, rain, heat or cold) during transport.
- d) If vehicles are required to remain stationary during hot or sunny weather, measures must be taken to ensure avoidance of heat stress, such as parking the vehicle in the shade or using fans to ensure continuous ventilation. If possible, keep trucks moving in hot weather to ensure continuous ventilation.
- e) A list of all deaths and injuries occurring during transport must be kept on file and made available to the program Validator during assessments. Incidences of dead-on-arrival (DOA's) from any single source farm greater than an average of 0.2% per flock must be reported to the Certification Body and will be subject to investigation by the Program.
- f) Haulers must take prompt corrective action to prevent identified causes of injury and/or mortality during transport.

Recommendations

- Only transport poultry in vehicles specifically designed for their transport in order to provide adequate care during the journey
- Use only short duration, direct from farm to final destination trips, as they are least detrimental to the birds' health and well-being
- Have haulers avoid driving during high traffic times or on congested routes
- Use actively ventilated transport vehicles and on-board equipment for monitoring temperature and humidity
- When vehicles are required to remain stationary during hot weather, park in a shaded area to help control abrupt rises in temperature

6.6 Unloading and Placement of Chicks

Requirements

- a) Farm personnel must be present at the time of delivery and placement of birds so they can assess the physical condition of the birds upon arrival (Code requirement, Section 6.2, 6.3).
- b) Take steps to prevent newly arrived chicks from becoming chilled or overheated during the unloading process (Code requirement, Section 6.2).
- c) Handle boxes of chicks with care and ensure unloading personnel do not drop boxes, as chicks are easily injured (Code requirement, Section 6.2).

7.0 EUTHANASIA

7.1 Training and Other Considerations

Requirements

- a) Train stockpeople on the criteria used for recognizing when euthanasia is appropriate. Euthanize chickens without delay that:
 - Are not likely to recover
 - Do not respond to treatment and recovery protocols
 - Have signs of chronic, severe, or debilitating pain and distress causing them to suffer
 - Cannot walk or stand
 - Cannot access water and feed
 - Exhibit rapid weight loss or rapid loss of body condition
- b) Prior to attempting euthanasia, consider:
 - Proper method of restraint
 - Appropriate method of euthanasia for size/weight/age of the bird
 - Proper use and maintenance of euthanasia equipment
 - Operator safety
 - Operator training, skill and comfort with performing the procedure
- c) Train stockpeople on the methods and equipment used to properly euthanize a bird.

7.2 Equipment and Procedures

Requirements

- a) Methods used to euthanize chickens must be quick and efficient, must avoid causing unnecessary pain or distress, and must be safe for the handler.
- b) Acceptable methods and related procedures include:

Method	Age/Size	Application and Further Guidance
Anesthetic overdose	Any	Must be administered under the direction of a licensed veterinarian and the carcass cannot be submitted for normal rendering due to contamination.
Penetrating captive bolt & Non-penetrating captive bolt	Over 7 days of age	The device must be purpose-designed for use on chickens and be suitable for, or adjustable to, the size of the chicken being euthanized. Correct placement of the device on the chicken's head is critical (consult the manufacturer's user guide). The bird must first be restrained as wing flapping and convulsions will occur. Operators must first be trained on use of the device and related procedures.
Manually applied cervical (neck) dislocation	Up to: 3 kg (7 lb)	Suitable if performed only on a small number of birds as operator fatigue compromises the effectiveness of this method. Ensure the stockperson has the training and strength to deliver fast and effective dislocation of the neck. The site of dislocation must be as close to the head as possible. Vertebrae must not be crushed in the process.
Decapitation	Any	The chicken must be restrained. The blade must be sharp and of adequate size, and the procedure must be carried out in one quick, smooth motion, resulting in complete severance of the head on the first attempt. This method is not appropriate when blood contamination poses a biosecurity issue.

Method	Age/Size	Application and Further Guidance
Gas inhalation: Nitrogen	Any	<p>Not commonly used on farm. Requires a specially-designed closed chamber, which must:</p> <ul style="list-style-type: none"> Be charged with pure nitrogen before birds are introduced (do not use in mixtures with other gases) Be designed to allow continual filling to maintain correct gas concentration, ensuring oxygen level remains under 5% Be stocked with birds loosely to allow gas penetration Allow exposure of birds to the gas for a long enough time to cause death or a state of unconsciousness that does not permit recovery
Gas inhalation: Carbon dioxide (CO ₂) mixture	Any	<p>Use of controlled atmosphere stunning using no more than 30% CO₂ and 2% oxygen by volume, mixed with an inert gas, such as argon or nitrogen. Requires a specially-designed closed chamber which must:</p> <ul style="list-style-type: none"> Be charged with high concentrations of the gas mixture before birds are introduced Be designed to allow continual gas refilling to maintain correct concentrations Be stocked with birds loosely to allow gas penetration Allow exposure of birds to the gas for a long enough time to cause death or a state of unconsciousness that does not permit recovery
PROHIBITED METHODS	Any	<ul style="list-style-type: none"> Manual blunt force trauma using devices <u>not</u> specifically designed for poultry euthanasia (e.g. hammer, floor, pipe) Mechanical cervical dislocation devices, as they typically involve crushing the cervical vertebrae in the neck Any other method that involves crushing of the cervical vertebrae in the neck Carbon dioxide (CO₂), pure/unmixed, as it causes distress and discomfort to birds prior to rendering them insensible Carbon monoxide (CO) and vehicle exhaust, as it is dangerous and potentially explosive at high concentrations Suffocation by piling in disposal containers Gunshot Electrocution Drowning Chloroform Ether Cyanide Thermal/heat exhaustion (i.e. hyperthermia) Any other method determined by the Certification Body to be inhumane or inappropriate for broiler chickens

- c) Inspect birds for signs of sensibility (consciousness) after attempting euthanasia (Code requirement, Section 8.5). Look/listen for each of the following signs:
- Corneal reflex: The bird should not blink when the surface of the eye is touched
 - Rhythmic breathing: Observe the vent area. There should be no sign of abdominal movement.
 - Vocalization: The bird should not make any vocalizations, excluding that coinciding with exhalation and the lungs deflating
 - Response to painful stimulus: There should be no response to pinching the comb
- d) Should the first attempt at euthanizing a bird fail, immediate application of the same or an alternate acceptable method of euthanasia is required. Have a backup method of euthanasia readily available.
- e) Confirm death prior to leaving a euthanized bird or disposing of its carcass (Code requirement, Section 8.5). Death is confirmed when breathing and the heartbeat have stopped.

- f) Remove dead birds from the flock immediately and dispose of their carcasses per biosecurity protocols (see Section 4.8 – Biosecurity and Sanitation Protocols).
- g) Euthanasia equipment must be kept clean and well maintained, and not overloaded. This will ensure it continues to operate effectively and efficiently.

Recommendations

- When euthanizing chickens, do so out of sight of live birds
- To ensure captive bolt devices don't malfunction due to a buildup of carbon or animal matter, clean the device daily when fired. Consult the user manual on how to properly maintain the device to keep it in good working condition.

7.3 Mass Depopulation

The *Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys* (2016) requires producers to have a plan for mass depopulation of the flock available or accessible in the event the entire flock or a large number of birds must be euthanized at once (Code requirement, Section 9). Refer to the Code of Practice for further instruction.

7.4 Certification of Abattoirs

While not currently a program requirement, the Certification Body will be phasing in a requirement that abattoirs (slaughter houses) and farms that slaughter chickens on site for consumption as food be assessed by a third party auditor for adherence to an approved slaughter program. Farms and abattoirs that pass this audit will be certified for slaughter of chickens.

At this time, producers must ensure that birds are slaughtered quickly and efficiently, causing minimal pain or suffering, understanding that use of certified abattoirs and on-farm slaughter facilities will be required in the future.

APPENDIX A: SUMMARY OF REQUIRED RECORD KEEPING

Record Keeping and Related Forms

Upon obtaining certification, Members will be expected to retain all records between one Annual Assessment and the next for a minimum of 3 consecutive years.

The Certification Body can provide template record keeping forms upon request. It is acceptable to use records from industry programs and/or any record keeping forms that have already been developed for the operation. Applicants that do not have a consistent record keeping system are encouraged to use and implement the Certification Program forms.

The following records are required for all flocks on all sites certified under the Program:

Section 2.0 – Feed and water

- a) List of feed ingredients, including an ingredient breakdown and “minimum guaranteed nutrient analysis” of feedstuffs for each group of birds
- b) List of feed supplements and additives, if used, and the application guidelines (e.g. product justification, dosage and duration of treatment)
- c) Feed suppliers
- d) Water test results
- e) List of water supplements and additives, if used, and the application guidelines (e.g. product justification, dosage and duration of treatment)

Section 3.0 – Environment

- a) Natural or full spectrum lighting transition plan, if applicable
 - For barns on existing operations that do not currently have a source of natural or full spectrum lighting (per Section 3.4 – Lighting), and renovation is needed in order to comply with this requirement, operators are granted a period of up to 3 years to install full spectrum lighting and up to 10 years to install natural lighting sources from the date of publication of this standard, provided that a renovation plan is in place and has been submitted to the Certification Body within 12 months of publication of this standard
- b) Lighting program details
- c) Daily minimum and maximum barn temperatures
- d) Weekly ammonia levels assessed at birds’ head height
- e) Free-range producers only:
 - A log documenting periods where access to the outdoors was restricted, with reasons
 - Evidence of range use, if popholes do not meet program requirements

Section 4.0 – Health and Biosecurity

- a) Flock Health Plan and the following related records:
 - Veterinarian contact information
 - A copy of all veterinary prescriptions
 - All vaccines, drugs and treatments used and purchased (receipts should be kept) – a record of drug serial numbers, withdrawal dates, dosages, expiry date on bottle, reason for use and location of administration. This includes homeopathic medicines.
 - Treatment log with reasons, treatment method used, method of bird identification, medication withdrawal times
 - Mortalities, culls, euthanized birds (including number of birds and cause, if known)
 - Disease outbreaks (including cause, if known)
 - Records of any lab testing or other diagnostics
- b) Biosecurity Plan
- c) Visitor log

Section 5.0 – Management

- a) A written code of conduct for staff
- b) Records for birds purchased at auctions/markets:
 - Farm of origin documentation
 - A complete history, including movement and transportation records, documenting previous owner(s) and farm(s) names
- c) Flock inventory
 - Breed and number of all birds
 - Sources of all purchases and sales of birds – a complete audit trail from farm to final sale
 - Year-end inventories of birds
- d) Emergency plan
- e) Emergency contact information

Section 6.0 – Transportation

- a) Verification of hauler certification in a transport training program, or a Standard Operating Procedure (SOP) and Emergency Protocol for transportation if hauler is not certified
- b) Record of all deaths and injuries occurring during catching, loading and transport
- c) Condemnations and dead-on-arrival records from the processor

APPENDIX B: LAMENESS SCORING GUIDE

A total of 100 birds are scored from at least two different locations within the barn. This also provides an opportunity for simultaneous assessment of litter quality in each location.

Score	Degree of Impairment	Description
0	None	Normal, foot curls when the bird picks it up. Gait is smooth with even steps. Bird is well balanced and capable of running and quick turns.
1	Detectable but unidentifiable abnormality	Gait is uneven at times; foot may or may not curl when the bird picks it up. Difficult to identify location of lameness.
2	Identifiable abnormality that has little impact on overall function	Gait is uneven; foot does not curl when the bird picks it up. Source of lameness is readily identified. Bird has an irregular, shortened stride. Bird also has poor balance and may occasionally be seen using its wing(s) to help balance itself while walking. Bird will remain in a standing position for longer than 15 seconds when undisturbed.
3	Identifiable abnormality that impairs function	Similar to score of 2, but the bird will remain lying down unless forced to move (gentle nudging by observer). When the bird does move, it typically uses its wings for balance while walking. The bird will lie down after several steps. Easy to determine the source of lameness. Bird will not stand for longer than 15 seconds when undisturbed but will stand within 5 seconds of being encouraged (gentle nudging).
4	Severe impairment of function but bird still capable of walking	Bird is reluctant to move and only moves when it is forced to (nudging by observer). Birds will use its wings to help it move by "wing-walking": wings will extend to the ground (act like a crutch to help the bird move). Bird will only take a few steps and then lie down again before attempting to move. Source of pain is evident. Bird will not stand on both feet within 5 seconds of being encouraged (gentle nudging).
5	Complete lameness	Bird is unable to move or will shuffle on the ground if it is forced to move. Bird is not capable of taking one step. Source of lameness is easy to identify.

Adapted from: Garner, J. P., et al. (2002). Reliability and validity of a modified gait scoring system and its use in assessing tibial dyschondroplasia in broilers. *British Poultry Science*. 43: 355-363.

SPCA Certified Lameness Scoring Form

Farm: _____ **Flock Size:** _____ **Breed:** _____

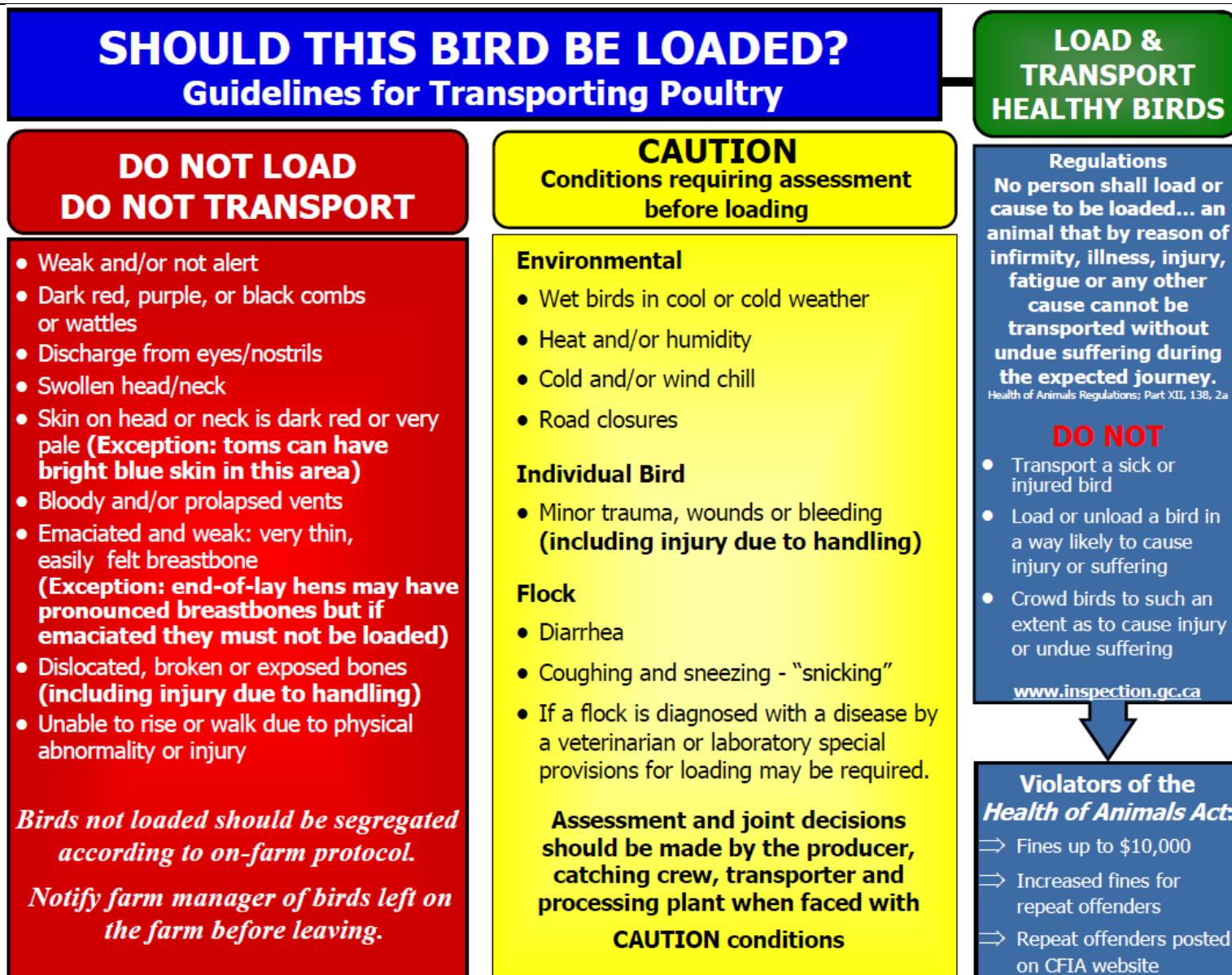
Score	Tally of Chickens Per Score	Total
0 (not lame)		
1		
2		
3		
4		
5		
Total number of chickens observed (group size):		

Lameness Prevalence

Score →	1	2	3	4	5
# of chickens per score					
% of chickens observed for each score					

To calculate the % of chickens observed, use the following equation:
 (# of chickens per score ÷ total # of chickens observed) x 100

APPENDIX C: DECISION TREE - SHOULD THIS BIRD BE LOADED?



The chart on this page was reprinted with permission from Farm & Food Care Canada

Guidelines for Dealing with Poultry

Identification of Sick or Injured Birds



Weak, not alert



Emaciated



Unable to walk



Unable to rise/ walk due to physical abnormality

(Do not confuse with fatigue)



Swollen head



Discoloured comb



Broken leg

LOAD & TRANSPORT HEALTHY

1. Identify
2. Cull
3. Dispose

CFIA Livestock Emergency Transport Line
1-877-814-2342
(Ontario only)

Environmental Considerations

Maximum Loading & Transport Densities	Moderate	Extreme Heat
Broiler Chickens	See Section 6.5	
Broiler Breeders	66 kg/m ²	56 kg/m ²
Turkeys	98 kg/m ²	83 kg/m ²
End-of-Lay Hens	63 kg/m ²	54 kg/m ²

Reference: The Recommended Code of Practice for the Care and Handling of Farm Animals - Poultry

- Factors to Consider**
- Duration of travel (including loading and lairage)
 - Weather at load-out, along route and at processing plant
 - Time of day of load-out
 - Number of birds in the barn
 - Ventilation in barn
 - Condition of barn (e.g. litter)

Recommended Code of Practice for the Care & Handling of Farm Animals

Air temperature in load should be maintained at 5°C to 30°C for all birds, except end-of-lay hens, which should be maintained at 13°C to 30°C.

Recent research (Mitchell and Kettlewell, 2008) recommends for broilers, an upper in load temperature limit of 24°C.

The chart on this page was reprinted with permission from Farm & Food Care Canada

APPENDIX D: TEMPERATURE-HUMIDITY INDEX

The following table provides a guideline for the loading and transporting of poultry.

The colour-coded humidex values, or “feels like” temperatures, correlate each temperature listed across the top of the table with each level of humidity listed down the side. Use the colour-coding as a guide for whether birds should be loaded and transported.

LOAD		CAUTION					DO NOT LOAD					
		Temperature °C (°F)										
		20 (68)	22 (72)	24 (75)	26 (79)	28 (82)	30 (86)	32 (90)	34 (93)	36 (97)	38 (100)	40 (104)
Relative Humidity	30 %	18 (64)	22 (72)	24 (75)	26 (79)	29 (84)	32 (90)	34 (93)	37 (99)	40 (104)	44 (111)	47 (117)
	40 %	19 (66)	22 (72)	25 (77)	28 (82)	31 (88)	34 (93)	37 (99)	40 (104)	44 (111)	47 (117)	51 (124)
	50 %	22 (72)	24 (75)	27 (81)	30 (86)	33 (91)	36 (97)	40 (104)	43 (109)	47 (117)	51 (124)	55 (131)
	60 %	24 (75)	25 (77)	28 (82)	32 (90)	35 (95)	39 (102)	42 (108)	46 (115)	50 (122)	55 (131)	59 (138)
	70 %	25 (77)	27 (81)	30 (86)	34 (93)	37 (99)	41 (106)	45 (113)	49 (120)	54 (129)	58 (136)	63 (145)
	75 %	26 (79)	27 (81)	31 (88)	34 (93)	38 (100)	42 (108)	46 (115)	51 (124)	55 (131)	60 (140)	65 (149)
	80 %	26 (79)	28 (82)	32 (90)	35 (95)	39 (102)	43 (109)	48 (118)	52 (126)	57 (135)	62 (144)	67 (153)
	85 %	27 (81)	29 (84)	33 (91)	36 (97)	40 (104)	45 (113)	49 (120)	54 (129)	59 (138)	64 (147)	69 (156)
	90 %	28 (82)	30 (86)	33 (91)	37 (99)	41 (106)	46 (115)	50 (122)	55 (131)	60 (140)	66 (151)	71 (160)

This table was adapted from information provided by Environment Canada and the *Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chicken and Turkeys* (2016).

APPENDIX E: MEASUREMENT CONVERSION TABLE

Multiply an imperial number by the conversion factor shown to get its equivalent in metric units. Divide a metric number by the conversion factor shown to get its equivalent in imperial units.

	← Divide Multiply →	
Imperial Units	Approximate conversion factor	Metric Units
Length		
inch (in)	25	millimetre (mm)
foot (ft)	30	centimetre (cm)
yard (yd)	0.9	metre (m)
mile (mi)	1.6	kilometre (km)
Area		
square inch (sq in)	6.5	square centimetre (cm ²)
square foot (ft ²)	0.09	square metre (m ²)
square yard (yd ²)	0.836	square metre (m ²)
square mile (sq mi)	259	hectare (ha)
acre (ac)	0.4	hectare (ha)
Volume		
cubic inch (in ³)	16	cubic centimetre (cm ³ , mL, cc)
cubic foot (ft ³)	28	cubic decimetre (dm ³)
cubic yard (yd ³)	0.57	cubic metre (m ³)
fluid ounce (oz)	28	millilitre (mL)
pint (pt)	0.57	litre (L)
quart (qt)	1.1	litre (L)
gallon (Imp.) (Imp gal)	4.5	litre (L)
gallon (U.S.) (U.S. gal)	3.8	litre (L)
Weight		
ounce (oz)	28	gram (g)
pound (lb)	0.45	kilogram (kg)
short ton (2000 lb) (sh t)	0.9	tonne (t)

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