

Standards for the Raising and Handling of Pigs

BCSPCA
SPEAKING FOR ANIMALS

Standards for the Raising and Handling of Pigs

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Approved: May 2014

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Animal Welfare Foundation of Canada

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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 to BC SPCA farm animal welfare standards by trained, independent inspectors. Third party, independent reviewers then determines certification.

The BC SPCA believes that an animal's welfare is synonymous with its quality of life and that animals' health and emotions both contribute to their welfare.

While we acknowledge it is not possible to prevent animals from experiencing all pain or discomfort in their lives, BC SPCA 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 Pig Standard

The key components of the program for pigs are:

- Space and an environment to move freely and exhibit species-specific behaviours
- Access to resting space
- Access to feed and water and provision of feed that does not contain mammalian or avian derived protein, except for milk products
- Surgical procedures are regulated by age and through pain control
- Development, implementation and maintenance of a Herd Health Plan for pig health management

The BC SPCA Standard for the Raising and Handling of Pigs 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. No endorsement by SAC members or their respective organizations is implied.

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.

How to Use the Standard

This standard meets or exceeds Canada's Code of Practice for the Care and Handling of Pigs (2014).

- a) SPCA Certified program participants must have a thorough understanding of, and adhere to, the Codes 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 environmental and food safety practices.
 - c) **Mandatory Requirements** are represented as **Must** do practices for program participation.
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- 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 back 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.
- e) **Recommendations and Guidance** provide further information and, when appropriate, outline timelines for future standard requirements.

*Further detail on non-compliance issues can be found in the Operations Manual.

2.0 FEED AND WATER

2.1 Feeding Space, Equipment and Systems

- a) Feeders must be constructed, located and maintained such that all pigs in the area can use them (Code requirement, Sec. 1.7). They must be suitable for the size of the pig using them.
 - b) Check feeders daily to ensure they are clean and working properly.
 - c) Floor feeding systems are prohibited.
 - d) For ad libitum feeding, there is to be a maximum of:
 - 6 pigs per feed place* when using a dry feeder with no full head/shoulder barriers between feeding places
 - 10 pigs per feed place* where there are full head/shoulder barriers
 - 14 pigs per feed place* where there is the opportunity to mix water with the feed (wet/dry feeders)
 - e) If pigs are limit fed, provide enough feed places* for all pigs to eat simultaneously. ESF systems exempt – see Section 2.1 g).
 - f) In group housing, enclosed stalls can be provided in addition to the common (loafing) area for temporary use during feeding, provided the following requirements are met:
 - Feeding stalls must be wide enough so that the body of the pig is not in contact with both sides of the stall simultaneously
 - Feeding stalls must be long enough so that the pig's body is not touching both ends of the stall simultaneously
 - Pigs cannot be locked into a feeding stall for longer than two hours per 24-hour period
 - g) For Electronic Sow Feeding (ESF) systems, there is to be a maximum of:
 - 60 sows per ESF
 - 45 gilts per ESF
- Note: If an ESF system is used, training of gilts and sows on how to use the system is required. See Recommendations and Guidance below for tips on how to train animals to an ESF system.

*A feed place is considered as the space required by a single pig while eating. Calculation: maximum shoulder width x 1.1. For a list of feeding space allowances based on pigs of various weights, refer to Appendix F of the Pig Code of Practice (2014).

Recommendations and Guidance

Floor feeding systems have proven difficult to manage effectively and frequently cause undue welfare concerns. There is little research demonstrating that every animal is able to obtain their daily nutritional requirement in a floor feeding system. This may be due to increased levels of aggression among pigs (competition for food) in such systems. In addition, if floors are not kept clean, pigs are forced to eat their feed off of a manure-packed or urine-soaked area, which is unhygienic and poses health risks. For these reasons, floor feeding systems often lead to emaciation, more fighting-related injuries and poorer overall health and well-being.

In ESF systems, the feeder exit should direct the animal away from the pre-feeding area/entrance to the feeder. Ensure that all animals pass through the ESF station daily so that they are maintaining a healthy body condition (see Appendix B). Pigs should have good health and vigour. For wet/dry electronic sow feeders, it is recommended that at least two drinkers be provided outside each feeder.

Gilts and sows that have never used an ESF system should be trained to use the system in small groups of fewer than 20 animals, using a separate training area. To create a training area, separate the pen into pre-feeding and post-feeding areas so that gilts/sows are easily identified as those who have eaten and those who have not. Only non-fed gilts/sows should have access to the entrance of the feeder. The training pen should be located in an area of the barn that can be watched closely. Gilts/sows that are new to the system may have to be enticed into the feeder by keeping the door open or sprinkling a small amount of feed on the floor, or they may have to be herded in. Training should be complete in a week, but it is advisable to keep trained gilts in a low-density gilt pen (< 35 gilts/pen) for an extra two weeks.

It is recommended that tray dividers be used to prevent newly weaned pigs from standing in the feeder.

Store feed in a clean location. Cover feed hoppers to prevent feed contamination from rodents, weather or airborne substances. Clean feed bins regularly.

2.2 Feed Management and Nutrition

- a) Feed must be provided each day to all pigs (Code requirement, Sec. 2.1). Skip-a-day and interval plans are prohibited. For requirements pertaining to feed withdrawal in lairage and in transit, refer to Section 6.3 (b-c).
- b) Pigs must receive a diet that is nutritionally balanced (as per National Research Council (NRC) requirements) and in quantities that maintain health and vigor. Dietary requirements vary by species, age, phase of gestation and stage of production/growth. Adjust rations to meet the changing needs of pigs throughout their developmental stages.
- c) Feed management must be well planned in order to ensure that all pigs receive nutrition to maintain appropriate body condition for each stage of production, especially during lactation when demands for milk production have a greater impact on body condition. Producers must take corrective action for pigs at a body condition score (BCS) of 1-2, or if pigs exhibit an abnormal reduction in feed intake. Take corrective action for pigs scoring a BCS 4-5 (too fat).
 - The Program requires that the 1 – 5 scale in Appendix B is used for assessing BCS. Refer to the Appendix for optimal BCS for sows and boars.
- d) Feed must not contain mammalian or avian derived protein, with the exception of milk or milk products. Ensure feed bins containing an old feed mix are flushed out prior to filling with new feed to guarantee no prohibited ingredients are fed to the pigs.
- e) The use of probiotics, enzymes, and nutritive supplements in feed is acceptable provided they are used for health promotion and in accordance with all other sections of this standard.
- f) Addition of pharmaceutical products (e.g. antibiotics) to feed without prior veterinary diagnosis and prescription, or for disease prevention or performance enhancement, is strictly prohibited. Addition of any pharmaceutical products to feed will only be permitted for treatment of a pre-diagnosed illness, if diagnosed and prescribed by a swine veterinarian. In such cases, proper treatment and withdrawal times must be recorded, closely monitored, and adhered to.
- g) A list of any feed supplements or additives used must be presented to the Validator.

Recommendations and Guidance

Controlling feed intake of boars, gestating sows and farrowing sows is important to maintain optimal health and welfare. However, satisfying appetite of pigs on controlled diets is also

important to welfare. Feeding bulky feeds, such as those high in fiber, can help satisfy appetite while meeting nutritional requirements of the animal.

2.3 Water

- a) Check water dispensers daily to ensure they are clean and working properly.
- b) Clean, palatable drinking water must be available to pigs 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. For requirements pertaining to water withdrawal in lairage and in transit, refer to Section 6.3 (a).
- c) Water must be tested at least once annually to ensure its suitability for pigs (Code requirement, Sec. 2.3). Take samples directly from drinking source (e.g. water nipple). Test results must be submitted to the Validator, or sent to the Certification Body. Take immediate corrective action if water is determined to be unsuitable for pigs.
- d) Waterers must be constructed, located and maintained such that all pigs in the area can use them (Code requirement, Sec. 1.7).
- e) To reduce water wastage and injuries, mount nipple drinkers slightly above shoulder height of the smallest pig. For pens housing pigs of different sizes, nipples must be available at varying heights to ensure that all pigs in the pen have access to a water source.
- f) Liquid feeding systems must be supplemented with a separate water source (Code requirement, Sec. 2.3).
- g) There is to be a maximum of:
 - 10 pigs per water place
 - 6 (gilts) or 8 (sows) per water placeFor trough watering, a water place is described as space required by a single pig while drinking (approximately 1.1 times the shoulder width of the pig). For nipple drinkers or bowls, a water place is one nipple or one water bowl.
- h) Addition of pharmaceutical products (e.g. antibiotics) to water without prior veterinary diagnosis and prescription, or for disease prevention or performance enhancement, is strictly prohibited. Addition of any pharmaceutical products to water will only be permitted for treatment of a pre-diagnosed illness, if diagnosed and prescribed by a swine veterinarian. In such cases, proper treatment and withdrawal times must be recorded, closely monitored, and adhered to.
- i) A list of any water supplements or additives used (other than vitamin/mineral mixes) must be presented to the Validator.

Recommendations and Guidance

Refer to Appendix G of the Pig Code of Practice (2014) for information on water intake and recommended flow rates and heights of nipple drinkers for pigs in various stages of production.

Contact the Certification Body if you require assistance determining what type of water tests to conduct to determine water quality in your facilities.

For wet/dry or electronic sow feeders, it is recommended that at least two drinkers be provided outside each feeder. Position drinkers over slatted flooring, if available, to prevent dampening of bedded areas.

During very hot or very cold weather, check water supply twice daily to ensure pigs' requirements are being met.

2.4 Piglet Nutrition

- a) All reasonable efforts must be made to ensure that piglets receive colostrum during the first 1 – 3 hours of life. Piglets appearing gaunt or lethargic must receive special attention to ensure they consume enough colostrum and/or milk to meet health and nutritional needs.
- b) Foster, split suckle, hand rear or euthanize piglets at risk of dying due to malnutrition (Code requirement, Sec. 2.1.1).
- c) Administer supplemental iron to piglets raised indoors to prevent nutritional anemia (Code requirement, Sec. 2.1.1).
- d) A palatable solid feed or creep feed formulated specifically to meet the nutritional needs of piglets must be provided for all piglets from 10 days of age.
- e) All piglets must have access to clean drinking water from 10 days of age.
- f) Piglets must not be weaned from the sow before 28 days of age. An exception may be made by the Certification Body if the welfare of the sow or piglets is expected to be compromised by weaning at day 28.
- g) Weanlings must have continuous access to fresh feed and observed at least once daily to ensure all piglets have been eating (Code requirements, Sec. 2.1.2).

Recommendations and Guidance

There are health benefits to having piglets obtain colostrum from their own mother. Split suckling (removing half of the piglets after a period of colostrum intake into a heated container) improves the colostrum intake of later born piglets in large litters. Frozen or freeze-dried colostrum should be available and used when colostrum from another farrowing sow is not available.

In the case where a sow is unable to nurse any or all of her litter, a practical cross-fostering program should be adopted. Fostering should occur within the first 6 to 24 hours after farrowing to minimize disruptions to an established teat order. In the event where a sow is unable to nurse a litter for the minimum of 28 days, all piglets in the litter could be fostered to a sow that is weaning her own litter provided she can supply enough milk to meet the needs of the entire fostered litter. Liquid milk replacer can also be used to feed the piglets.

3.0 ENVIRONMENT

3.1 Pens and Flooring – General

- a) Pens must be designed to ensure the comfort, hygiene and health of all animals.
- b) Floor surfaces must provide solid and stable footing and good traction to prevent slipping. Substrates used to improve traction are acceptable provided they are maintained in clean, dry condition to ensure pig safety.
- c) Housing pigs on fully slatted floors or bare concrete with no access to a bedded area is prohibited.
- d) Partially slatted flooring is permitted if the slat/gap widths do not cause injury.

Stage of production	Minimum slat width		Maximum gap width	
	mm	(in.)	mm	(in.)
Piglets	50	(2.0)	11	(0.4)
Weaners	50	(2.0)	14	(0.6)
Growers and finishers	80	(3.1)	18	(0.7)
Sows and post-service gilts	80	(3.1)	20	(0.8)

Source: The Welfare of Farmed Animals (2007)

- e) The slatted area must not exceed 50% of the pen space and must not extend into the resting area.
- f) All animals must have access to a well-drained and well maintained resting area with bedding. The bedded area must be large enough to accommodate all penmates lying on their sides at once.
- g) Bedding must be clean, dry, and not pose a health risk to the pigs.

Recommendations and Guidance

Bedding options:

Straw, shavings, sand and similar substrates add comfort to the pigs' environment. Other options are possible. Producers are encouraged to contact the Certification Body if they are unsure as to whether the type of bedding provided meets the criteria for pig comfort.

Traction can be improved by:

- Finishing concrete flooring with texture or skid-resistant grooves
- Keeping flooring dry and free of manure and urine buildup
- Adding sand, shavings, sawdust or a similar substrate (ensure substrates have not been treated with chemicals that are harmful to pigs)

3.2 Space Allowance – General

- a) Confinement housing systems that inhibit pigs' freedom of movement (i.e. turning around, stretching, standing and lying comfortably) are prohibited. This includes the use of gestation stalls, boar stalls and pig tethering (i.e. tying pigs to a stall, crate or other fixed

object in order to restrict movement). Temporary restraint of sows in the farrowing house may be permitted for newborn piglet protection. Refer to Section 3.4 for details.

The following equation was used to calculate the space allowances for weanling, grower and finisher pigs (Sec. 3.6) as well as for group housed sows/gilts in breeding and gestation (Sec. 3.4):

$$\text{Area} = k \times \text{BW}^{0.667}$$

Where:

- Area represents the total floor surface area and is expressed in m²
- Pig bodyweight (BW) is expressed in kilograms
- k-value is a floor space allowance coefficient that relates bodyweight to floor surface area (value used is indicated in table footers)

Adequate pen space is important for:

- Allowing pigs to perform a wide range of behaviour patterns, including activities that require movement about the environment (e.g. socialization, exploration/seeking, play)
- Allowing all pigs to lie on their sides at once with minimal contact. This is particularly important when environmental temperatures exceed 25°C, and when pigs are past the grower stage and no longer tolerate other pigs lying on top of them.

3.3 Breeding and Gestation Housing

a) The following minimum space allowances must be met for group housed sows and gilts:

Bodyweight range for group and individually housed breeding and gestating females	Minimum floor space allowance (per pig)			
	Solid bedded ^a		Partially slatted ^b	
	m ²	(ft ²)	m ²	(ft ²)
Group housing				
100 – 150 kg (220 – 330 lb)	1.7	(18)	1.5	(16)
150 – 200 kg (330 – 440 lb)	2.0	(22)	1.9	(20)
200 – 250 kg (440 – 550 lb)	2.3	(25)	2.1	(23)
250 – 350 kg (550 – 770 lb)	2.9	(31)	2.7	(29)
Individual housing	5.9	(64)	5.4	(58)
Minimum pen dimensions	2.0 x 3.0 m	(7 x 9 ft)	2.0 x 2.7 m	(7 x 8 ft)

^a k = 0.059 on solid bedded flooring (AAFC, 1993)

^b k = 0.054 on partially slatted flooring (AAFC, 1993)

b) As per Section 3.2 a), use of tie stalls, gestation stalls/crates and other types of confinement housing systems that prevent gestating pigs from the freedom of movement (i.e. turning around, stretching, standing and lying comfortably) are prohibited.

Recommendations and Guidance

Refer to section 5.8 – Management During Breeding and Gestation for guidance on how to control aggression among group housed pigs.

3.4 Farrowing Systems and Newborn Piglet Housing

- a) Provide bedding for nest building, comfort and warmth in solid flooring systems at least 48 hours prior to expected farrowing. Materials such as straw (or similar) are suitable nest building. Sand is not a suitable nest building material.
- b) The following space allowances must be provided to sows, gilts and newborn piglets in the farrowing house:

Individual farrowing pens (solid bedded)		
^a Total farrowing pen area (including piglet creep area)	7.5 m ²	(81 ft ²)
^b Minimum farrowing pen width (not including piglet creep area)	2.1 m	(7 ft)
Piglet creep area	0.8 m ²	(8 ft ²)

^a Individual farrowing pen size will accommodate the sow and her litter up to 40 days old (Canadian Organic Standards, 2011 Amended version); approx. a litter of 10 piglets with an average of 35kg bodyweight each

^b The minimum width indicated will allow the sow to turn around. This limit excludes the piglet creep area since the sow is typically unable to enter the creep area.

- c) Restraint of a sow is permitted for a period of no more than 5 days post-farrowing if needed for protection of newborn piglets. Such systems must meet the following conditions:
 - As per Section 3.2, tethering is prohibited as an option for restraint; permission must first be obtained from the Certification Body if using a farrowing crate/stall for restraint
 - Sows must be able to stand up and lie down, unassisted, at free will
 - The body of the sow must not have to be in contact with both sides of the enclosure simultaneously when she is in a normal standing position
 - There must be enough room to allow for comfortable nursing space while the sow is lying down
 - The back of the sow must not be in contact with any part of the top of the enclosure while she is standing normally
 - The sow must not be forced to rest her head in the feeder
 - Piglets must have enough space to cross behind or in front of the sow while she is lying down
 - Piglets must have access to a separate creep area (see Section 3.4 d)
- d) Young piglets are prone to hypothermia and must have access to a piglet creep area with a supplemental heat source or additional bedding to protect them from cool temperatures and drafts during the first week. Huddling or piling behaviour often indicates that the piglets have become too cold. See Section 3.4 b) for creep area space requirement. See Section 3.9 – Temperature.

- e) Piglets must be provided with a source of water and feed from 10 days of age that is inaccessible to the sow. Also see Section 2.4 – Piglet Nutrition.

Recommendations and Guidance

Female pigs are strongly motivated to build a nest prior to farrowing. This usually occurs 24 to 48 hours before she gives birth. During that time, she will rearrange her bedding into a nest for herself and her piglets. Inability to nest-build frequently leads to stereotypies (abnormal, repetitive behaviours) indicative of frustration, stress and poor psychological well-being. The SPCA Certified program strives to provide pigs with the ability to express natural behaviours, such as nest-building, that promote well-being. Farrowing systems with slatted flooring do not accommodate the use of bedding.

The success of any system is dependent on the quality of inputs, including management and stockmanship. Sow observation and management during farrowing becomes more critical as artificial aids are removed.

3.5 Weanling, Grower and Finisher Housing

- a) The following minimum space allowances must be met for weanlings, growers and finishers:

Bodyweight range for weanling, grower and finisher pigs		Minimum floor space allowance (per pig)			
		Solid bedded ^a		Partially slatted ^b	
		m ²	(ft ²)	m ²	(ft ²)
10 – 35 kg	(22 – 78 lb)	0.5	(5.4)	0.4	(4.5)
35 – 50 kg	(78 – 111 lb)	0.6	(6.5)	0.5	(5.7)
50 – 75 kg	(111 – 167 lb)	0.8	(8.6)	0.7	(7.5)
75 – 100 kg	(167 – 222 lb)	1.0	(11)	0.8	(9.0)
100 – 125 kg	(222 – 278 lb)	1.1	(12)	1.0	(11)
125 – 150 kg	(278 – 331 lb)	1.3	(14)	1.1	(12)

^a k = 0.045 on solid bedded flooring

^b k = 0.039 on partially slatted flooring

(Code of Practice for the Care and Handling of Pigs (2014))

- b) Protect newly weaned piglets from drafts.

Recommendations and Guidance

As a general rule, air speeds over 0.25 m/sec (50 ft/min) create too much of a draft for newly weaned pigs.

Consider providing a source of supplemental heat for weanling pigs, as this will help to achieve recommended environmental temperatures (see Section 3.9 – Temperature).

3.6 Boar Housing

- a) As per Section 3.2 a) of this standard, stall housing of boars is prohibited.
 b) The following minimum space allowances must be provided to breeding boars:

Breeding boar housing	Minimum floor space (per pig)			
	Solid bedded		Partially slatted	
	m ²	(ft ²)	m ²	(ft ²)
^a Minimum space allowance per pig	7.4	(80)	5.6	(60)
^b Minimum pen dimensions	2.4 x 3.1 m	(8 x 10 ft)	1.8 x 3.1 m	(6 x 10 ft)
^c Service area / breeding pen (dry, non-slip, solid flooring):	9.3 m ² (100 ft ²)			

^{a,b} Reference: Code of Practice for the Care and Handling of Pigs (2014)

^c Reference: AAFC (1993)

- c) Small, compatible groups or pairs are permitted; however, if fighting within the group results in more than minor abrasions, boars must be separated.
 d) As of July 1, 2024, boars must be housed in individual pens (Code requirement, Sec. 1.1.6).

Recommendations and Guidance

Using uncontaminated sand, shavings, sawdust, straw or dirt will create a non-slip surface in the breeding area.

3.7 Enrichment

- a) Multiple forms of environmental enrichment must be provided to allow pigs freedom to perform their natural behaviours and enhance their physical and social environment (Code requirement, Sec. 1.8). Refer to Recommendations and Guidance below for more information.
 b) All pigs (including boars) must be housed within sight, sound and smell of other pigs.

Recommendations and Guidance

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

- Expand upon the number and variety of normal behaviours
- Improve the pigs' ability to cope with stressors
- Prevent development, frequency and severity of abnormal behaviours (e.g. reducing aggression and problem behaviours, like tail, ear or flank biting, or belly nosing)
- Better use of the surrounding environment

There are several categories of enrichment.

- Social – direct or indirect contact with other pigs

- Occupational – devices that provide both exercise and a psychological challenge for pigs
- Physical – objects, structures or substrate added to the environment
- Sensory – things that stimulate a pig's senses
- Nutritional – involves changing the method of food delivery or offering varied or new food types

The best types of enrichment are complex, manipulatable, chewable, changeable or destructible. Enrichment should be monitored to ensure it doesn't pose health risks to pigs (e.g. choking, strangulation, poisoning, digestive issues, pathogen transfer). It is preferable to alternate between a few enrichments so pigs do not habituate to them. Objects should be capable of being washed and disinfected or replaced between groups. Do not place enrichments designed to promote activity in resting areas. Refer to Appendix H of the Pig Code of Practice (2014) for additional guidance on selecting enrichment for pigs.

It is strongly recommended that pigs be allowed access to the outdoors (see Section 3.12 – Outdoor Access).

3.8 Lighting

- a) Lighting of at least 50 lux must be provided for no less than 8 hours per day (Code requirement, Sec. 1.5).
- b) During daylight hours, indoor lighting must be either:
 - Natural lighting (i.e. sunlight via windows, doors, open sided barns, skylights, etc.), or;
 - Full spectrum lighting (i.e. daylight simulating bulbs)For barns that do not have a source of natural or full spectrum lighting, an implementation plan must be submitted to, and approved by, the Certification Body. The transition period cannot exceed 10 years.
- c) A dark area (~ 5 lux or less) must be available for pigs for at least 8 consecutive hours per day unless natural daylight lasts longer than 16 hours, thus shortening the dark period. Exception will be made for the use of heat lamps in farrowing areas.
- d) At night time, low-lux lighting must be available to allow for thorough assessment of the herd and facilities if needed. For non-electrified housing, portable battery- or gas-powered lighting sources (e.g. gas lamps, flashlights) of sufficient lux for this task are acceptable.

Recommendations and Guidance

Fifty lux of light intensity would be sufficient for reading for a normally sighted person. This is the minimum light intensity permitted during daylight hours. It is recommended that a higher intensity (150-250 lux) be provided in pig handling areas.

3.9 Temperature

- a) Pigs must have access to a thermally comfortable environment at all times. See Recommendations and Guidance, below.
 - b) Corrective action must be taken if pigs show signs of being too hot (e.g. indicators: lying apart, panting) or too cold (e.g. indicators: huddling, piling, shivering).
 - c) House newborn piglets at temperatures that allow them to maintain normal body temperatures (Code requirement, Sec. 1.4).
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Recommendations and Guidance

The following table illustrates optimum temperatures and desirable limits for pigs of varying stages of production:

Type	Body Weight Range, kg (lbs)		Optimum Temperature, °C (°F)	Desirable Limits, °C (°F)
Newborn piglets	n/a		35 (95)	32 - 38 (89 - 100)
Young piglets	2 - 5	(4 - 11)	30 (85)	27 - 32 (81 - 89)
Weanling piglets	5 - 20	(11 - 44)	27 (80)	24 - 30 (75 - 86)
Grower pigs	20 - 55	(44 - 122)	21 (70)	16 - 27 (61 - 81)
Finisher pigs	55 - 110	(122 - 244)	18 (65)	10 - 24 (50 - 75)
Gestating sows	n/a		18 (65)	10 - 27 (50 - 81)
Lactating sows	n/a		18 (65)	13 - 27 (55 - 81)
Boars	n/a		18 (65)	10 - 27 (50 - 81)

Adapted from Myer and Bucklin (2012)

When pigs show signs of being too warm, options to cool them include increasing the space available, providing wallows (outdoor environments), or providing evaporative coolers, sprinklers, water drips or misters (indoor environments). Cooling (water) devices in indoor environments should not be positioned over bedded areas of the pigs' environment.

When pigs show signs of being too cold, options to warm them include providing supplementary heating (e.g. heat lamps, heat mats/pads) or additional bedding.

3.10 Ventilation and Air Quality

- a) Ventilation rates in buildings must be maintained to avoid high humidity and draughts. Pigs (especially when young) can be susceptible to respiratory diseases and chilling.
- b) Pigs must be provided with fresh air through ventilation programs and maintenance of barn conditions such that aerial contaminants are not noticeably unpleasant to a human observer. Ventilation rates will help to ensure proper circulation of fresh air throughout the animal's indoor environment and exhaustion of air contaminants (e.g. dust and gases) to the barn's exterior.
- c) Ammonia concentrations must not exceed 25ppm at pig eye level (Code requirement, Sec. 1.4). Ammonia must be evaluated at the animals' head height weekly in all barns and recorded using automated equipment or litmus paper test kits available through the Certification Body. These records must be made available to the Validator.
- d) In order to prevent carbon monoxide (CO) containing exhaust fumes from entering the barn, gas-powered equipment must not be used near the barn's air inlets. High CO levels can be fatal to pigs and humans.

Recommendations and Guidance

Hydrogen sulphide (H₂S) is a toxic gas that smells like rotten eggs. H₂S levels can increase dramatically during manure pit agitation (slatted flooring environments) and can be fatal to pigs

and humans alike. In such systems, it is strongly recommended that manure pits be emptied when there are no pigs in the room, and that the appropriate safety equipment is worn by individuals in the nearby vicinity.

3.11 Sanitation and Waste Management

- a) Feed and water containers must be clean and well maintained.
- b) Flooring must be maintained to prevent the accumulation of manure or urine.
- c) For indoor facilities, dirty or wet bedding must be replaced to ensure that animals have a clean, dry place to lie. In a well-managed compost pack system, bedding must be added frequently enough to maintain a dry resting area for the pigs.
- d) Hospital pens, maternity areas and nursery pens must be cleaned between occupancy by individuals or groups.
- e) All by-products such as manure, bedding, afterbirths and carcasses must be managed and disposed of in accordance with relevant government regulations (or recommendations where regulations do not exist) and in such a way that pigs, predators and nuisance animals do not have access to them.

Recommendations and Guidance

It is good practice to clear manure from pens multiple times per week, and between groups of occupants. A complete cleaning, washing and disinfection of each area of the production facility should be carried out at least once per year, and more frequently when possible. More thorough and frequent sanitation of certain production areas, such as the farrowing facilities and hospital pens, is necessary to ensure pig health and welfare.

3.12 Outdoor Access

Although encouraged, especially during good weather, outdoor access is not a requirement of this Standard. Where outdoor access is provided, the following requirements apply:

- a) Acceptable outdoor environment options include good quality pasture, a non-concrete (earthen) exercise yard or a clean and well-maintained bedded pack with stable footing.
 - b) For pasture/range systems, sustainable range management practices, such as rotational grazing, must be employed.
 - c) If housed outdoors during winter, a windproof and waterproof shelter must be provided so that all pigs may rest on their sides simultaneously in a dry, deeply bedded area. This is especially important for the health and welfare of young piglets.
 - d) For summer conditions, a sheltered/shaded area with space to allow all pigs to lie down simultaneously and to lie apart from each other if they wish, must be accessible. Shelter may be naturally occurring (e.g. treed areas) or man-made.
 - e) Steel pipe, smooth wire and electric fencing are the preferred types of field fencing. Barbed wire fencing is discouraged. Electrified barbed wire fencing is prohibited.
 - f) The use of nose rings is prohibited (Code requirement, Sec. 1.9).
 - g) Develop and implement a protocol to protect pigs from parasites and predators when on pasture (Code requirement, Sec. 1.9).
 - See Section 4.2 (b) – Monitoring and Maintaining Herd Health (RE: parasite control)
 - See Section 5.14 – Nuisance Animal Control (RE: predator control).
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Recommendations and Guidance

Avoid outdoor areas prone to flooding, large bodies of standing water, stony soils and heavy soils.

Pigs have a natural instinct to wallow, which is the act of coating their body surface with mud. When given the opportunity, pigs will create a wallow in their outdoor environment. Because they lack functional sweat glands, and most domestic/commercial breeds have very little body hair, pigs are prone to overheating, sunburn and other health risks when housed outdoors.

Wallowing has been shown to benefit pigs in the following ways:

- Thermoregulation (cooling the body)
- Skin care, grooming and health
 - Prevents sunburn
 - Controls external parasites
 - Prevents bites from insects
 - Disinfects skin wounds
 - Sloughs off old skin and hair
- Hides their scent from predators
- In some cases, wallowing has been shown to promote play, social and sexual behaviours

The SPCA Certified program strives to provide pigs with the ability to express natural behaviours, such as wallowing, that promote well-being. It is recommended that pigs be allowed to access wallows when housed outdoors.

4.0 HEALTH AND BIOSECURITY

4.1 Herd Health Plans

- a) Producers must establish a working relationship with a practicing swine veterinarian, known as a Veterinary Client/Patient Relationship (VCPR).
- b) A written Herd Health Plan must be developed and implemented by the farm manager and submitted to the Certification Body for review. Template plans are available from the Certification Body on the Web Portal.
- c) The Herd Health Plan must be updated annually and after a major health incident (e.g., disease outbreak) or significant change to the production system is made (e.g. introduction of new species to the farm, facility changes).

Recommendations and Guidance

A VCPR is in place when:

- The vet assumes responsibility for making clinical judgments about the health of the pigs and the need for medical treatment, and the client agrees to follow the vet's instructions;
- The vet has enough knowledge of the pigs to, at minimum, initiate a general or preliminary diagnosis of the medical condition of the pigs. This means the vet will have recently seen the herd and is personally familiar with their keeping and care by virtue of an examination or by medically appropriate and timely visits to the facilities where the pigs are kept.

The Certification Body has developed a template herd health plan that is available to farmers as a resource. Farmers may opt to submit their own plan provided the information it contains covers that requested in the Certification Body's Herd Health Plan template. Consult your veterinarian for assistance with development of the plan.

4.2 Monitoring and Maintaining Herd Health

- a) Unless otherwise specified, each animal must be observed at least once daily for:
 - Body condition (see Appendix B – Body Condition Scoring Guide)
 - Physical injury
 - Foot health and lameness (see Appendix C – Lameness Scoring Guide)
 - Infectious diseases
 - Metabolic diseases
 - Abnormal behaviour / behavioural problems(Code requirement, Sec. 3.3)
 - b) Monitor herd for signs of internal/external parasitism, especially pigs with outdoor access. See Recommendations and Guidance below for further considerations.
 - c) Investigate behavioural problems (vices) to identify the cause and enact a solution (Code requirement, Sec. 3.3).
 - Examples of vices: belly-nosing, sucking, tail biting
 - Potential causes: environment (e.g. drafts, stocking density), feed (e.g. nutrient imbalances), health factors (e.g. sick/injured pigs), management practices
 - d) Areas (e.g. hospital pens) must be provided to segregate and treat sick and injured pigs.
 - e) Pigs that are sick, injured, lame, in pain or suffering must be provided immediate medical care or be euthanized by an acceptable method. Ensure stockpersons understand when it is appropriate to euthanize an animal. If fit for human consumption, these animals can
-

- be slaughtered on farm in accordance with provincial regulations (Code requirements, Sec. 3.3, 6.2).
- Refer to section 7.0 – Euthanasia and Slaughter for acceptable methods
 - See Appendix C – Lameness Scoring Guide for appropriate courses of action
 - Lameness will be assessed by the Validator as per Appendix C during on-farm assessments
 - See Appendix J of the Pig Code (2014) – Decision Tree for Euthanasia
- f) Pigs with untreatable conditions, not responding to treatment, or not fit for transport must be euthanized.
- Refer to Section 6.2 – Fitness of Pigs for Transport; and
 - Section 7.0 – Euthanasia and Slaughter
- g) Continue to monitor sick and injured pigs daily or more often while still on the farm (Code requirement, Sec. 3.3).
- h) For required health records, refer to Appendix A (bullet point 3).

Recommendations and Guidance

When consistency of individuals in groups is maintained and mixing of new pigs into the group is minimal, the group is stable and aggressive behaviours are less frequent. Splitting of groups is acceptable as pigs grow.

Producers should score their pigs for lameness at regular intervals, such as during weighing of movement from one area of production to another, according to the protocols described in Appendix C. Aim to have 2% or less lameness in the herd at any given time (Code target, Sec. 3.3).

Pigs with outdoor access should be monitored at least once every two months for internal parasite load and should be inspected at least once a year for external parasites. Consider the following:

- Develop and implement parasite control and treatment strategies tailored to the farm location and management under the guidance of your vet
- Familiarize/train stockpeople on the basic biology of parasites that affect pigs and how to detect them
- Ensure incoming breeding stock receive parasite treatment if deemed necessary by your vet

Ensure all new animals originate from sources of known health status. As a precaution, new stock should be quarantined for a period of time to allow monitoring for disease prior to mixing them with the home herd.

Sick and injured pigs frequently benefit from being segregated while undergoing medical treatment and recovery. In hospital pens, these pigs don't have to compete with healthy pigs for food, water and comfortable lying areas. Hospital pens should be designed so that they are warm, draft-free and comfortable with non-slip flooring and easy access to feed and water. Provide supplemental heat, bedding and additional space.

4.3 Medications and Vaccines

- a) All pigs must be vaccinated as required by law, appropriate to each farm and according to the veterinarian's recommendation. Consult with a veterinarian on what vaccinations are appropriate for your farm.
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- b) The use of therapeutic antibiotics is regulated by the Certification Body. Such treatments must be prescribed by a veterinarian for treatment of a specific, diagnosed condition.
- c) Addition of pharmaceutical products (e.g. antibiotics) to feed or water will only be permitted for treatment of a pre-diagnosed illness, if diagnosed and prescribed by a swine veterinarian. Addition of such products to feed and/or water without veterinary diagnosis and prescription, for disease prevention, or for performance enhancement is strictly prohibited.
- d) The use of pharmaceuticals for induction of farrowing is permitted only for the benefit of the animal and must not be administered as routine management practice. Consult your vet for advice on when induction is appropriate.
- e) Use of vaccines, drugs and other treatments other than as indicated on the label is prohibited, unless prescribed by a veterinarian.
- f) For required treatment records, refer to Appendix A (bullet point 3).

Recommendations and Guidance

It is useful for farmers to provide stockpeople with a reference guide containing a record of drug serial numbers, dosages, withdrawal dates, expiry dates on bottles, reasons for use and site of administration.

4.4 Monitoring Mortality Rates

- a) All mortalities and causes (if known) must be recorded. These records must be made available to the Validator.
- b) If reason for mortality is suspicious, send dead animals for diagnostic testing.
- c) The following table outlines maximum mortality thresholds at any given time. If these thresholds are exceeded, a veterinary 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.

	Maximum Prevalence
^a Pre-Weaning	18 %
^a Nursery/weanlings	3.0 %
^a Grow-Finish	2.5 %
^b Herd (annually)	30 %

^a Wilson et al. (1986)

^b Merck Veterinary Manual (2014)

Numbers include animals that die or are euthanized on farm. Numbers also include those animals culled or shipped for reasons of poor health. If these rates are exceeded, a follow up consultation with a veterinarian is required to discuss the action plan for mitigation and prevention. A summary of the outcome or the veterinarian's report may be requested by the Certification Body.

- d) Mortalities must be removed from the pen immediately and disposed of according to local, provincial and/or federal regulations.
- e) Instances of reportable diseases or suspicion of such diseases among the herd must be brought to the attention of a federal veterinarian. A current list of reportable diseases in

pigs can be found on the Canadian Food Inspection Agency website (see Appendix G – Reference Material).

4.5 Biosecurity

- a) Farms must have a written biosecurity plan to minimize the risk of introducing disease to the herd. The plan can be simple or more complex, depending on the level of risk on the farm.
- b) It is the farmer's responsibility to ensure visitors to the farm follow protocols described in the farm's biosecurity plan.

Recommendations and Guidance

The Certification Body has developed a template biosecurity plan that is available as a resource via the Web Portal. Farmers may opt to submit their own plan provided it addresses all the information requested in the Certification Body's template.

It is recommended that the biosecurity plan be developed using an industry-approved program (such as the Canadian Pork Council's Canadian Quality Assurance Program). The plan can also be developed with the assistance of a licensed veterinarian or the Certification Body. A national swine biosecurity training program administered by the Canadian Swine Health Board (www.swinehealth.ca) is available.

All guests, personnel and Validators should be logged (e.g. by signing a visitor log-book) in order to assist in on-farm disease tracking/control. The visitor log should indicate when the last contact with another pig farm occurred. It is recommended that all visitors to the farm be free from contact with other pigs within the 48-hour period prior to their visit.

People should have access to appropriate foot dips or dedicated footwear, and disinfectants for washing hands should be accessible at each barn to avoid cross-contamination, especially if different breeds, species, ages or sources of pigs are located on the same site. Guests should be encouraged to wear appropriate footwear and clothing (e.g. plastic booties or disinfected rubber boots, clean cover-alls, etc.).

Ensure all new animals originate from sources of known health status. As a precaution, new stock should be quarantined for a period of time to allow monitoring for disease prior to mixing them with the home herd.

5.0 MANAGEMENT

5.1 General

- a) All farm records must be kept up to date. See Appendix A for a list of all record keeping requirements.

5.2 Staff Knowledge and Training

- a) All farm staff with responsibility to the pigs must have access to and be familiar with the SPCA Certified Standards for the Raising and Handling Pigs and the Code of Practice for the Care and Handling of Pigs (2014).
- b) Prior to being charged with care of the herd, all stockpeople must be trained in, and knowledgeable of:
 - Behavioural needs of pigs
 - Normal and abnormal pig behaviours
 - Common illnesses/diseases of pigs
 - How to care for sick or injured pigs
 - Humane handling techniques, including the concepts of “field of vision,” “flight zone” and “point of balance” (refer to Appendix K in the Pig Code of Practice (2014))
 - Low-stress pig handling methods
 - Skills in performing common husbandry procedures
- c) Familiarize untrained stockpeople by having them work in conjunction with trained and experienced stockpeople.

5.3 Animal Handling

- a) Animals must be handled with care and in a manner that imposes the minimum possible stress on the animals.
 - Attempt to minimize noise levels from personnel or equipment when pigs are being moved, including during loading and unloading
 - Move pigs in small, manageable groups
 - Attempt to move pigs at a pace that is comfortable to the pig
 - Have patience when moving pigs. Do not handle pigs aggressively (e.g. by kicking, walking on top of them, picking them up, suspending them, pulling them by one front leg, the ears or the tail).
- b) Use humane moving devices like shakers, flags, plastic paddles or chase boards to move pigs. Electric prods must not be used.
- c) When moving pigs, take into account the facility design and surrounding environment. Design and operate races, gates and pens so that they do not impede the movement of pigs.

Recommendations and Guidance

Pigs move best when handled in small groups when they can walk side by side or follow a leader. Larger groups may bunch, pile up or turn around. Pigs may back up or refuse to move if they encounter bright spots, puddles, shadows, objects on the floor, gates, flapping objects or changes in flooring type/texture. They are also distracted by nearby people moving about.

Members are encouraged to take a livestock handling course and obtain a copy of the American Meat Institute’s Good Management Practices for Animal Handling and Stunning. Additional

references can be found in Appendix G. Producers can contact the Certification Body for information about these and other resources and courses on the handling of pigs.

Monitoring the number of slips and falls is a good indicator of whether handling is appropriate. Aim for fewer than 1% of animals falling (body contacts floor). See the American Meat Institute's Good Management Practices for Animal Handling and Stunning. Aim for 0% of pigs injured as a result of handling, restraint or moving (Code target, Sec. 4.1).

Minimize mixing of pigs, as it may lead to aggression. If mixing is unavoidable, the following techniques may help to reduce associated aggression:

- Ensure ample resources like feeders, waterers, enrichment devices so that pigs do not compete over them
- Add further environmental enrichments (refer to Section 3.7 – Enrichment)
- Allow more space per pig
- Mix pigs on full stomachs
- Provide escape areas to which subordinate animals can flee when being pursued by a dominant animal. Research indicates that post-mixing aggression is reduced when partial walls or partitions are added to the pen.

5.4 Surgical Procedures – General

- a) Surgical procedures must be performed by trained, experienced personnel using clean, sanitized and well-maintained equipment and accepted veterinary techniques.
- b) In order to avoid interference with colostrum intake, surgical procedures must not be performed on the first day of life unless medically necessary.
- c) Surgeries such as hernia repair, cryptorchidectomy, and other similar procedures must be performed in consultation with your vet and using the appropriate medications (e.g. anesthesia, analgesia, sedation, bleeding control). (Code requirement, Sec. 3.5)
- d) Major surgeries (e.g. caesarian section) must only be performed by a licensed veterinarian using the appropriate medications (e.g. anesthesia, analgesia, sedation, bleeding control).

Recommendations and Guidance

It is recommended that painful procedures be performed at the same time to reduce the stress associated with multiple handlings. This will also enable producers to make the most efficient use of pain medications administered/required for these procedures.

Avoid conducting surgical procedures at the same time as weaning to reduce stress.

5.5 Surgical Procedures – Castration

- a) The following table provides a list of pain medication requirements by age or weight of pig:

Age / Weight	Required Pain Medications(s)	Further Guidance
Up to 24 hours		Castration must <u>not</u> be conducted within the first 24 hours of age in order to avoid interference with colostrum intake.
2 - 7 days	Analgesics	Pain control must be administered using techniques taught by a veterinarian.
> 7 days	Local anesthetic AND analgesic	
> 23 kg (51 lbs)	Local anesthetic AND analgesic	Permission from the Certification Body must first be obtained. If permission is granted, castration must be performed by a veterinarian using anesthetics and perioperative analgesics.
Sexually mature boars		While uncommon, castration of sexually mature boars is prohibited.

- Local anesthetic: e.g. Lidocaine. Must be injected at the site of the procedure (i.e. locally). Consult with your veterinarian about appropriate injection site, timing and procedure.
- Analgesic: e.g. A non-steroidal anti-inflammatory (NSAID). Consult with your veterinarian regarding appropriate injection site, timing and procedure.
- Should farmers find it difficult to meet the requirements of this section, they are encouraged to contact the Certification Body for guidance.

Recommendations and Guidance

Surgical castration is a painful practice at any age and it is strongly recommended that producers provide a local anesthetic and an analgesic regardless of the age at which castration is performed.

The scientific research comparing the degree of pain experienced by piglets at different ages has produced ambiguous results. When comparing piglet vocalisations and time suckling, the research does not show clearly that castration is less painful before 7 days; however, the behavioural response to pain is more pronounced in piglets castrated after 14 days of age. Castration conducted before 7 days of age is less likely to impair piglet immunity.

Beyond the routine use of pain control for this procedure, the BC SPCA also asks producers to consider marketing intact boars in markets where lighter market weights are accepted, or to consider immunocastration. Both have been shown to reduce boar taint, thus improving pork quality. The Certification Body is aware that some processing plants penalize farmers who send intact males for slaughter, regardless of whether the pigs have been immunocastrated.

It is recommended that castration, tail docking and needle teeth trimming (see Sections 5.6 and 5.7) be performed at the same time to reduce the amount of stress piglets undergo during catching and restraint and from the procedures themselves. This will also enable producers to make the most efficient use of pain medications administered/required for these procedures. Producers are strongly encouraged to perform these practices between 24-72 hours of age.

5.6 Surgical Procedures – Tail Docking

- a) The decision to tail dock pigs must be based on a welfare risk/benefit analysis rather than carrying out docking as a routine. Farmers must first attempt to control tail biting by non-invasive methods (refer to the Recommendations and Guidance section below for tips on how to prevent and control tail biting).
- b) Should tail biting occur, remove tail bitten pigs from the group as soon as possible. The tail biter should also be removed if it can be identified so as to control biting of other penmates. Do not move a tail biter into the same pen as tail bitten pigs.
- c) Producers unable to control tail biting may request permission from the Certification Body to perform tail docking on future litters of piglets. Tail docking will only be permitted in circumstances when all efforts to prevent and control tail biting have failed.
- d) The following table provides a list of pain medication requirements by age or weight of pig in the instance that permission to perform tail docking has been granted by the Certification Body:

Age	Required Pain Medications(s)	Further Guidance
Up to 24 hours	Tail docking must <u>not</u> be conducted within the first 24 hours of age in order to avoid interference with colostrum intake.	
2 - 14 days	Analgesics	Pain control must be administered using techniques taught by a veterinarian. Remove no more than the last third of the tail provided that it is long enough to cover the vulva (females) or anus (males).
> 14 days	n/a	Prohibited

- Local anesthetic: e.g. Lidocaine. Must be injected at the site of the procedure (i.e. locally). Consult with your veterinarian about appropriate injection site, timing and procedure.
- Analgesic: e.g. A non-steroidal anti-inflammatory (NSAID). Consult with your veterinarian regarding appropriate injection site, timing and procedure.
- Should farmers find it difficult to meet the requirements of this section, they are encouraged to contact the Certification Body for guidance.

Recommendations and Guidance

Tail biting is a complex issue with multiple potential causes such as crowding, inadequate nutrition, barn ventilation or temperature, poor air quality, and lack of enrichment. An outbreak leads to poor overall animal health and welfare as well as economic losses.

Some suggestions for preventing tail-biting include:

- Ensure appropriate barn temperature and ventilation rates (key point)
- Provide fresh straw or other bedding material daily – research has found bedding (especially straw) to be of benefit
- Provide new/alternating environmental enrichments (these will help redirect problem chewing behaviours) – see Section 3.7 - Enrichment
- Change mineral content of feed (ensure adequate salt levels to reduce attraction to blood)

- Ensure adequate dietary protein levels are available in the feed (may reduce attraction to blood)
- Increase feeding space allowance
- Increase floor space allowance
- Decrease number of pens managed per stockperson
- Consider split-sex rearing
- Consider housing pigs in smaller groups to prevent a widespread outbreak should tail biting occur

Tail docking was adopted to prevent tail biting, but can lead to infection and prolapse if tails are docked too short. If docked too long, it's ineffective. Regardless of length, docking can result in lifelong pain and sensitivity for the pig.

If tail docking must be performed and approval has been granted by the Certification Body, it is recommended that producers provide both a local anesthetic and an analgesic.

It is also recommended that tail docking, castration and needle teeth trimming (see Sections 5.5 and 5.7) be performed at the same time to reduce the amount of stress piglets undergo during catching and restraint and from the procedures themselves. This will also enable producers to make the most efficient use of pain medications administered/required for these procedures. Producers are strongly encouraged to perform these practices between 24-72 hours of age.

5.7 Surgical Procedures – Teeth Clipping and Tusk Trimming

- a) Trimming of needle teeth is not permitted as a routine procedure. Minor scrapes on the face of piglets and teats of the sow heal quickly and can be successfully treated. Such injuries are much less of a welfare issue than the side effects of clipping teeth.
- b) In exceptional circumstances where sow or piglet welfare is at risk, needle teeth trimming may be performed under the following conditions:
 - Needle teeth trimming must be carried out between 2-7 days of age
 - Remove only 1/3 to 1/2 of the tooth
 - Administer analgesics. Consult with your veterinarian regarding appropriate injection site, timing and procedure.
 - Avoid trimming low birth weight piglets
 - Consult with your vet on use of a grinder instead of clippers. Research suggests that grinding causes less damage to the mouth and teeth of piglets than clipping if performed by a trained and competent person using an appropriate grinder.
- c) If tusk trimming (adult pigs) is performed, it must be done by a competent stockperson or a vet using a local anesthetic, analgesic and a sedative. Tusks must only be trimmed to 2-3cm length (above the gum line) to avoid damaging the gums and the tooth's pulp cavity and to avoid causing lasting pain to the pig (Code requirement, Sec. 4.5.5).

Recommendations and Guidance

- Trimming the top third (tip) of the tooth is sufficient to provide protection and leaves the tooth less susceptible to infection compared to trimming the tooth down to the gum line
 - Leaving the needle teeth of the smallest or poorest doing piglets in a litter intact offers an advantage in establishing teat order
 - It may not be necessary to trim the teeth of small litters (< 10 piglets)
-

It is recommended that needle teeth trimming, castration and tail docking (see Sections 5.5 and 5.6) be performed at the same time to reduce the amount of stress piglets undergo during catching and restraint and from the procedures themselves. This will also enable producers to make the most efficient use of pain medications administered/required for these procedures. Producers are strongly encouraged to perform these practices between 24-72 hours of age.

5.8 Management During Breeding and Gestation

- a) Breeding practices must not cause pain or injury to the animals (Code requirement, Sec. 4.4).
- b) Do not breed gilts before they have achieved age, body weight, body condition and maturity essential for supporting and maintaining a litter of piglets, as well as for maintaining their health during pregnancy and post-farrowing (Code requirement, Sec. 4.4).
- c) Care must be taken to prevent aggression between group housed sows and gilts (see Recommendations and Guidance below). Pigs that suffer persistent bullying from penmates, severe injuries, or who lose body condition, should be moved to different accommodations or housed individually, keeping in mind they must still be housed within sight and sound of other pigs and according to the space allowances set in this standard.

Recommendations and Guidance

Aim for a body condition score of at least 3 by the 70th day of pregnancy (sows and gilts). Refer to Appendix B for an illustrated guide on body condition scoring. See table B.2 for optimal body condition scores of breeding pigs at different stages of production.

Ensuring a safe breeding environment is important to prevent injury during mating. Consider:

- Choosing boars of a size similar to the gilt or sow to prevent injury at mating. Breeding gilts too soon may lead to lameness and other problems.
- Removing objects or projections (e.g. nipple drinkers, feeder) that may cause injury
- Ensuring floors have good traction in mating areas. Use shavings or a similar material to add traction if necessary.

Select for traits that have a positive influence on animal health, behaviour and welfare. Maintain breeding records to help identify undesirable traits.

To minimize aggression among group housed pigs, consider the following strategies:

- Use a feeding system that reduces/prevents competition for feed (see Section 2.1)
- Allow more space per pig to prevent competition for optimal resting spaces
- Keep pigs in stable groups. Do not mix/re-mix frequently as this promotes aggression.
- Group gilts and first-parity sows together in a separate group from older, higher parity sows
- Mix pigs on full stomachs to aid in controlling post-mixing aggression
- Provide areas to which subordinate animals can escape when being pursued by a dominant animal. Research indicates that post-mixing aggression is reduced when partial walls or partitions are added to the pen, as they allow the subordinate animal to flee/hide.
- Add enrichment (refer to Section 3.7)

Some sows/gilts may not adapt to group housing and will become poor-doers. Such animals should be removed from the group.

5.9 Management at Farrowing

- a) Sows and gilts near farrowing must be monitored at least twice daily and preferably more often.
- b) Keep disturbances and noise to a minimum in the farrowing area.
- c) Provide immediate assistance to sows having difficulty farrowing. Seek veterinary guidance on how to recognize and assist with difficult farrowing if needed.
- d) When farrowing assistance is required, acceptable veterinary practices must be observed.
- e) Ensure the farrowing area remains clear of manure, afterbirth and any dead piglets.
- f) Monitor sows and newborn piglets for injury, disease and abnormal behaviour 4-5 times per day in the first few days post-farrowing, as that is the time when sow and piglet health problems are common.
- g) Some sows are aggressive towards piglets during and after farrowing. Isolate piglets if the sow is aggressive toward them, or they show signs of injury by the sow. Control and supervise the first few nursing periods to ensure the piglets are not injured by the sow.
- h) Encourage the sow to stand up 2-3 times per day starting the day after farrowing and for the first week following.
- i) Provide sows with continuous access to water post-farrowing (see Section 2.3 – Water).

Recommendations and Guidance

After all the piglets have been born, the sow should appear comfortable and should not continue to strain. She should stand and drink within a few hours.

Producers are strongly encouraged to record breeding dates in order to determine when farrowing is due. For pigs, the gestation period is 3 months, 3 weeks and 3 days (total: 115 days).

5.10 Cull Animal Management

- a) Cull animals must be cared for up to shipping or euthanasia.
- b) If cull animals are to be shipped, drug withdrawal times must be observed before they leave the farm.
- c) Animals too sick or injured to be transported must be treated immediately or euthanized on site.
 - See Section 6.2 – Fitness of Pigs for Transport
 - See Appendix E – Decision Tree: Should This Pig Be Loaded?
 - See Section 7.0 – Euthanasia and Slaughter

5.11 Animal Identification

- a) All pigs must be identified according to Canadian Food Inspection Agency (CFIA) regulations before leaving the farm. Visit the CFIA website or www.pigtrace.ca for details.
 - b) Within the SPCA Certified program, the following methods of identification are acceptable:
 - Ear tags (metal or plastic)
 - Ear tattoos
 - Shoulder slap tattoos (see Section 5.11 d, below)
 - Microchips / electronic transponders
-

- Temporary paints, dyes and wax markers that are non-toxic and have been specifically designed as farm animal markers
- c) When applying ear tags, avoid major blood vessels and ridges of cartilage.
- d) When applying shoulder slap tattoos, use equipment designed specifically for the size/age of the pig. Pigs should be at least 20 kg (44 lbs) body weight before applying slap tattoo identification. Do not use excessive force to apply a slap tattoo. Avoid boney areas like the shoulder blade.
- e) Ear notching is prohibited.

Recommendations and Guidance

For pigs marketed in Canada, slap tattoos associated with the pigs' farm of origin are a market-driven requirement. This national system exists to enable trace-back of pigs to their farm of origin if needed. Breeding pigs and pigs travelling to fairs, auctions, assembly yards, or other destinations off the farm, must also be identified according to CFIA requirements. For more detail on what types of identification meet CFIA standards, visit www.pigtrace.ca or the Canadian Food Inspection Agency website.

The recommended method of temporary identification is non-toxic paints, dyes and wax markers.

When applying ear tattoos, consider use of analgesics to control pain or perform the procedure at the same time as another procedure for which analgesics are used.

5.12 Purchase and Sale of Pigs

The program discourages the use of auctions/sale barns for purchasing and selling pigs.

- a) When the use of auctions/sale barns is unavoidable, the following documentation is required for each animal purchased (for breeding animals – see Section 5.12 b):
 - Signed affidavit from the seller confirming that pigs are raised under the SPCA Certified program
 - Farm of origin documentation
 - History including movement and transportation records, documenting previous owners/farms
- b) Replacement breeding stock that is not certified in the program must be managed to the SPCA Certified Standard for one month in order to be included under the farm's Certificate of Registration. Pregnant females must be managed within the program from conception. (Refer to the SPCA Certified Operations Manual for additional detail)
- c) Pigs with injuries, infectious diseases or obvious clinical signs of disease must not be sold off-farm or sent to auction/collection yards.
- d) Compromised pigs must not be sent to auction or collection yards.

5.13 Equipment and Emergency Preparedness

- a) Develop and follow a facility/equipment maintenance program so that all equipment and facilities are inspected at regular intervals and defects or malfunctions are corrected in a timely manner.
 - b) Emergency back-up systems and plans must be maintained and tested, especially for temperature, ventilation, feeding and watering equipment.
 - Emergency back-up systems: Back-up generators and any other equipment used in the event of a power failure.
-

- Emergency back-up plans: Procedures to be followed in the event of a natural disaster, power or other mechanical failure to ensure that animals can be cared for, housed, fed and watered. Include protocols for moving animals from their existing housing to alternative temporary housing in the case of flood, fire, or other natural disaster.
- c) Emergency provisions for drinking water and feed must be available in case of natural disaster, power failure or contamination.
- d) All fire prevention and detection devices and plans must be maintained, tested and up to date.
- e) Maintenance of waste storage facilities is essential to prevent groundwater, stream contamination and other such environmental disasters in the event of a natural disaster.

Recommendations and Guidance

Ensure stockpeople are familiar with protocols in the emergency back-up plan, and how to operate emergency back-up systems. A map of the farm illustrating all areas (indoor and outdoor), exits, emergency equipment and evacuation routes should be posted for workers to view.

Producers are urged to contact the Certification Body prior to purchasing new equipment if they are concerned about its compliance to the Program standards.

5.14 Nuisance Animal Control

- a) Management techniques must be used to control fly and insect populations. Fly paper and zap traps are acceptable. Take steps to locate and eliminate potential insect breeding areas.
- b) Pigs must be protected from predators on pasture, ideally by methods that do not cause death to the predator (e.g. use of guardian animals and/or electric fencing).
- c) Any guardian animals (e.g. dogs, llamas, donkeys) used to protect the herd from predators must also meet animal welfare standards for care and handling. This includes access to feed and water, grooming for the purpose of maintaining good health (e.g. hoof/claw trimming), parasite control and treatment of diseases/illnesses.
- d) Pigs must be protected from rodents in barn. Humane methods of rodent control must be used. This includes devices or systems that minimize suffering and/or cause a quick death.
 - Quick-kill snap traps are preferred over rodenticides
 - When used, rodenticides must only be applied using bait stations. Stations must be closely monitored to ensure prompt removal of dead rodents and avoid poisoning pigs.
 - Methods of rodent control that prolong discomfort or suffering, either due to the method itself or because the trap is ineffective, are unacceptable. For example, the use of glue boards, electrocution, drowning, live freezing or traps that cause death by starvation are strictly prohibited.
 - Traps that endanger pigs or other animals are prohibited.
- e) Methods of control for other nuisance animals (e.g. non-predatory birds like starlings and swallows) must also be humane. Prevention of entry to the barn is key. Traps/nets must be checked frequently.

Recommendations and Guidance

Preventing rodent infestations in barn:

- Avoid buildup of clutter inside or around the facility
 - Familiarize stockpeople with places rodent prefer to take shelter and take steps to eliminate or reduce those areas
 - Ensure feed storage containers and bins are rodent proof
 - Make other structures rodent proof when possible
-

6.0 TRANSPORT

6.1 Staff and Hauler Training and Preparation Pre-Transport

- a) Personnel involved in transporting animals are expected to 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 2001 Recommended Codes of Practice for the Care and Handling of Farm Animals – Transportation (available through the National Farm Animal Care Council)
 - The SPCA Certified Standards for the Raising and Handling of Pigs
 - The Transporter's Standard Operating Procedure and Emergency Protocol, as approved by the Certification Body (see Section 6.1 c, below).

Farm managers, stockpeople and haulers must have access to and be familiar with each of the documents listed in part a) above.
- b) Pigs must be transported by haulers/staff who have been certified for hauling pigs under the Certified Livestock Transport (CLT) program, the Transport Quality Assurance (TQA) program, or another approved training program. Verification of hauler certification must be submitted to the Certification Body. *Producers having difficulty sourcing certified haulers may contact the Certification Body for assistance.
- c) Non-certified haulers must submit a Standard Operating Procedure (SOP) and Emergency Protocol for transporting pigs to the Certification Body. At a minimum, the SOP and Emergency Protocol must outline how the requirements in Section 6.0 – Transport and Handling are met.
- d) Stockpeople involved in arranging transport of animals 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.
- e) Define the role and responsibilities of each stockperson and the transporter prior to loading or unloading.

6.2 Fitness of Pigs for Transport

- a) Evaluate individual pigs' fitness for transport in the context of each trip, with consideration of factors like weather and total trip duration (Code requirement, Sec. 5.2).
 - b) Compromised pigs must be treated on farm, euthanized or shipped under special provisions directly to a veterinarian or to slaughter, not through auction markets (Code requirement, Sec. 5.2). Also see Appendix E – Should this Pig be Loaded?
 - c) Unfit animals must not be transported unless to a veterinarian for diagnosis or treatment. Animals deemed unfit for transport include those that:
 - Score 2 or lower for BCS on a 1-5 scale (see Appendix B for body condition scoring)
 - Score 4 or 5 for lameness on a 1-5 scale (some exceptions apply; see Appendix C)
 - Are within 6 weeks of expected farrowing or have farrowed within the past 48 hours (see Section 6.2 e, below)
 - Are lactating (see Section 6.2 e, below)
 - Are under 14 days of age
 - Are distressed (see Recommendations and Guidance below for definition)
 - Fall within any of the descriptions listed on the Should this Pig be Loaded? decision tree (Appendix E)
-

- d) If a pig lies down while being handled or moved and appears distressed, allow it to rest and recover away from the path of other pigs for 2-3 hours before reattempting to move or load it. Do not force the pig to move before it has recovered as that may result in heart failure and death. Such pigs may never be fit for transport and may need to be euthanized on-farm (additional details in Recommendation and Guidance section below).
- e) Lactating animals or animals within 6 weeks of farrowing must not be transported to a sale or to slaughter, but may be transported for short durations between properties that are part of the same farm operation.
- f) Animals 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.
- g) If an animal becomes unfit for transport during transit, it must be euthanized (refer to Section 7.0 – Euthanasia and Slaughter). All such instances must be recorded and a copy of this record must be kept on the farm and made available to the Validator.

Recommendations and Guidance

Distressed pigs are unfit for loading and transport. Rest typically does not help these pigs so they may need to be euthanized on farm. A distressed pig will exhibit one or more of the following symptoms:

- Panting, gasping, difficulty breathing
- Blotchy skin (discoloured; usually red or dark pink blotches)
- Elevated body temperature
- Unable to get up
- Reluctant to move
- Trembling
- Stiff body

It is strongly recommended that animals be scored for health and fitness before leaving the origin farm and at rest stops. Both body condition and lameness scores should be assessed. Refer to Appendices B and C, respectively, for scoring guides.

6.3 Holding, Loading and Unloading

- a) Pigs must have access to water up until being loaded for transport.
 - b) Withdraw feed a few hours before loading to prevent vomiting and death loss in transit.
 - c) Total feed and water withdrawal time in transport and lairage from the premises of origin to the final destination and up until slaughter must not exceed 24 hours. See Recommendations and Guidance, below.
 - d) Only competent stockpeople must be tasked with loading and unloading pigs (Code requirement, Sec. 5.1).
 - e) Animal handlers must load and unload animals according to the requirements set in Section 5.3 of this standard (Animal Handling). As per Section 5.3, electric prods must not be used on pigs.
 - f) Ramps and loading/unloading bays must:
 - Facilitate easy movement
 - Be wide enough to ensure pig movement is unrestricted while being loaded/unloaded
 - Be constructed with secure footholds
 - Prevent pigs from falling off or injuring themselves
 - Prevent pig escape
-

- g) Maximum slope of loading/unloading ramps is 20 degrees (Code of Practice – Transportation, 2001).
- h) All injuries and deaths occurring during loading and unloading must be recorded. A copy of this record must be kept on the farm and made available to the Validator.

Recommendations and Guidance

It is recommended that feed be withdrawn at least 4 hours prior to transport. Heavy feed intake immediately prior to loading has been associated with dizziness, nausea, vomiting, hyperventilation and death loss in transit.

Refrain from mixing unfamiliar pigs in the hours prior to transport, if possible, as it will result in increased aggression and injuries.

It is recommended that dividers be placed within transport vehicles so that no more than 30 market pigs or 50 feeder or weanling pigs be held in any one section. If possible, mature boars (especially those with tusks) should be penned individually in transit as they tend to become aggressive with other animals. If they must be housed together, mature boars of similar body size should be housed in groups no larger than 15 pigs.

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

Confirm that loading and receiving facilities are compatible with the type of vehicle being used by the hauler.

6.4 Transport Conditions

- a) Overcrowding on pig transport vehicles can lead to increased stress, injury and mortality. Loading density must not exceed the following in any compartment of the transport vehicle:

Small Pigs					
METRIC			IMPERIAL		
Body Weight (kg)	Floor Space / Pig (m ²)	Loading Density (kg / m ²)	Body Weight (lb)	Floor Space / Pig (ft ²)	Loading Density (lb / ft ²)
15	0.11	138	30	1.1	27.5
25	0.14	175	50	1.5	33.8
35	0.18	200	70	1.8	39.0
45	0.21	219	90	2.0	44.0
55	0.23	237	110	2.4	46.3
65	0.26	250	130	2.7	49.0
75	0.29	257	150	2.9	52.0

Large Pigs					
METRIC			IMPERIAL		
Body Weight (kg)	Floor Space / Pig (m ²)	Loading Density (kg / m ²)	Body Weight (lb)	Floor Space / Pig (ft ²)	Loading Density (lb / ft ²)
85	0.32	268	190	3.5	54.5
100	0.36	278	230	4.1	56.0
115	0.41	280	250	4.3	57.5
130	0.46	285	290	5.0	58.5
145	0.51	285	310	5.3	58.5
160	0.56	285	350	6.0	58.5
175	0.62	283	370	6.3	58.5
190	0.68	280	410	7.1	57.5
205	0.74	278	430	7.5	57.0
215	0.80	274	470	8.4	56.0
235	0.87	268	490	8.8	55.5
250	0.95	263	530	9.8	54.5
265	1.02	260	550	10.2	54.0
280	1.12	252	590	11.2	52.5

This table was adapted from the Recommended Code of Practice for the Care and Handling of Farm Animals – Transportation (2001). Refer to Appendix D for the pig loading density charts illustrated in the Transport Code.

- b) Weanling piglets must not be transported for longer than 12 hours. All other pigs must not be transported for longer than 24 hours without being given a 5-hour (minimum) rest period. See Recommendations and Guidance below for information on rest periods. Note requirements around feed and water withdrawal in Section 6.3 (a-c).
- c) While on the truck, animals must be able to assume a natural position without coming into contact with the roof or upper deck of the vehicle.
- d) Pigs must be segregated from different species while in transit on the same vehicle.
- e) Pigs of substantially different weight, size, age or health status must be penned separately from each other while in transit on the same vehicle.
- f) Measures must be taken to shelter pigs from unfavorable environmental conditions (excessive wind, rain, heat or cold) during transport and before slaughter.
- g) During cold weather:
 - Bedding such as straw or wood shavings must be added to vehicles for added warmth (especially for newly weaned pigs), to assist in absorbing urine and feces, to provide better footing for the animals and to protect them from hard, cold flooring. Bedding must be free of substances that would harm pigs.
 - The transport truck's side vents must be adjusted so that there is a balance between protection from the weather and ventilation that promotes air circulation.

- Refer to Section 3.9 – Temperature for a list of optimal temperatures and desirable limits for pigs
- h) During hot weather:
 - See Appendix M in the Pig Code of Practice (2014) to determine safe temperatures/humidities for transporting pigs
 - Reduce stocking density by 10-20% if you must load and travel in the danger/emergency temperature-humidity index areas
 - If the temperature is above 27°C (80°F), wet pigs or truck walls with a coarse spray of cool water prior to loading and at rest stops. Do not use cold water (will cold-shock the pigs) and do not mist (will increase the humidity).
 - Do not over bed as it will increase warmth. Light bedding such as moist shavings or sand must be added to vehicles to assist in absorbing urine and feces, to provide better footing for the animals and to protect them from hard flooring. Bedding must be free of substances that would harm pigs.
 - Pigs must be transported with the transport truck's side vents open to promote ventilation.
 - If vehicles are required to remain stationary during hot/sunny weather, measures must be taken to ensure vehicle ventilation aids in avoidance of heat stress (e.g. parking the vehicle in the shade). If possible, keep trucks moving in hot weather to ensure continuous ventilation.
 - Refer to Section 3.9 – Temperature for a list of optimal temperatures and desirable limits for pigs
- i) All injuries and deaths occurring during transport must be recorded. A copy of this record must be kept on the farm and made available to the Validator. Haulers must take prompt corrective action to prevent identified causes of injury and/or death.

Recommendations and Guidance

Pigs should only be transported in vehicles specifically designed for their transport. Where possible, pigs should be transported directly from farm to final destination (slaughterhouse or other farm) rather than through sales yards, auctions or collecting stations. While the benefit to providing rest periods during transit is that pigs are able to access feed and water, the downfall is that these transition periods (collecting, mixing of animals, loading, unloading, the beginning of transport) have been proven to increase stress, injuries and mortalities. When possible, short duration, direct-from-farm-to-final-destination trips are recommended as they are least detrimental to the animals' health and well-being.

Pigs are very sensitive to heat stress and problems may start at only 16°C (60°F). At 32°C (90°F) death losses may double compared to 16°C (60°F). During hot weather periods, efforts should be made to transport pigs at night or during the coolest part of the day, instead of during peak temperature periods. The use of actively ventilated transport vehicles and on-board equipment for monitoring temperature and humidity is strongly recommended. Avoid driving during high traffic times or on congested routes, if possible. Parking the vehicle in a shaded area during rest stops will help control any abrupt rises in temperature during hot weather. Take action to cool pigs prior to loading or during rest stops (e.g. spraying with cool (not cold!) water).

Indestructible, easily disinfected liners on metal floors and sides can protect the pigs' skin from freezing in cold weather. Rain and wind exacerbate cold weather effects on pigs.

7.0 EUTHANASIA AND SLAUGHTER

7.1 Euthanasia

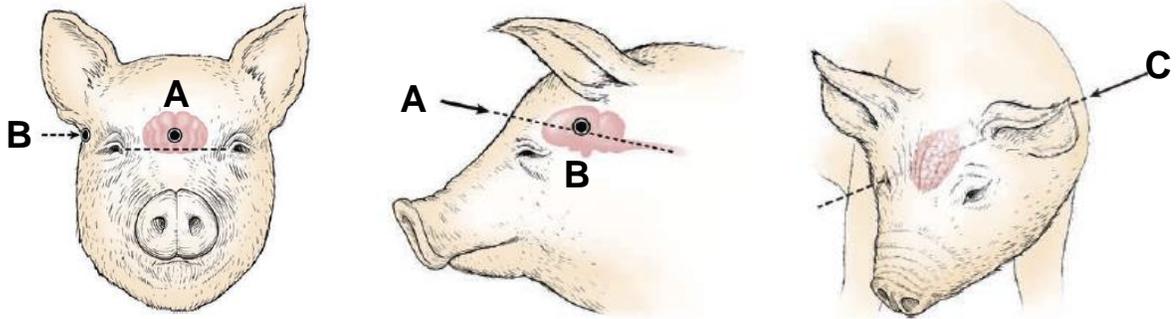
- a) In order to facilitate timely on-farm euthanasia, a written on-farm euthanasia plan must be developed in consultation with a licensed veterinarian (Code requirement, Sec. 6.1). Ensure stockpersons are familiar with this plan.
- b) Train stockpeople responsible for pig euthanasia to recognize when pigs need to be euthanized. Familiarize them with the written euthanasia action plan and train them on the criteria, methods and tools used for proper euthanasia, as listed in the plan. Consider:
 - Appropriate method for size/weight of pig
 - Proper method of restraint
 - Proper use and maintenance of euthanasia equipment
 - Operator safety
- c) Animals destined to be euthanized must not be forced to move when it is likely to cause additional pain or suffering, and must not be dragged prior to being euthanized.
- d) The method used to euthanize pigs on-farm and in transit must be quick, must avoid causing unnecessary pain or distress to the animal and must be safe for the handler. Acceptable euthanasia methods for pigs, according to the World Health Organization (OIE) and the Code of Practice for Pigs (2014), are:

Method	Weight	Application and Further Guidance
Anesthetic overdose	All	<ul style="list-style-type: none"> ▪ Some drugs are strictly controlled. Such drugs must be administered intravenously by, or under the direction of a licensed veterinarian. ▪ Safe, secure carcass disposal may be required. Confirm with your vet.
Non-penetrating captive bolt	Up to: 9 kg (20 lb)	<ul style="list-style-type: none"> ▪ Equipment: Use the correct cartridge or PSI specified in the manufacturer's manual. The equipment must be designed for the pig's weight range. ▪ Positioning: The frontal site is the only acceptable location of placement for this method. The device should be placed flush with the pig's forehead. See siting guidelines in Section 7.1 f). ▪ Secondary step: A secondary step such as bleeding out may be required for the larger pigs. Confirm insensibility before performing the secondary step.
Penetrating captive bolt	9 - 120 kg (20 - 264 lb)	<ul style="list-style-type: none"> ▪ Equipment: Use the correct cartridge, charge and bolt length for pigs, as specified in the manufacturer's manual. ▪ Positioning: The frontal site is the only acceptable location of placement for this method. The device should be placed flush with the pig's forehead. See siting guidelines in Section 7.1 f).

Penetrating captive bolt + Secondary step	> 120 kg (> 264 lb)	<ul style="list-style-type: none"> ▪ Equipment: Use the correct cartridge, charge and bolt length for pigs, as specified in the manufacturer's manual. ▪ Positioning: The frontal site is the only acceptable location of placement for this method. The device should be placed flush with the pig's forehead. See siting guidelines in Section 7.1 f). ▪ Secondary step: Can be bleeding out, pithing, or repeat application of the penetrating captive bolt. ▪ Confirm insensibility before performing the secondary step, or immediately repeat if using penetrating captive bolt for a second time.
Gunshot to the head	> 9 kg (> 20 lb)	<ul style="list-style-type: none"> ▪ Shotgun: A 12, 16 or 20 gauge shotgun can be used on grow-finish pigs, mature sows and boars. A 28 or 410 gauge shotgun is only appropriate for pigs under 24 weeks of age. 'Slug' ammunition is preferred over 'shot' ammunition due to its ability for consistent and effective skull penetration. ▪ Rifle: Minimum muzzle energy of 300 foot pounds for grow-finish pigs, mature sows and boars. A 22 calibre rifle is only suitable for use on pigs under 24 weeks of age. Use round-nosed and solid bullets. Common "wadcutter" target shooting ammunition is not suitable for euthanasia. Fragmenting bullets may only be used for nursery or grow-finish pigs. ▪ Positioning: Hold shotgun, rifle or handgun muzzle 5-25 cm (2-10 inches) from the skull. See siting guidelines in Section 7.1 f). ▪ Skill: Must only be done by persons well versed in handling firearms and licensed to use them. ▪ Location: Should be done outdoors on soil or soft ground to avoid bullet pass through and ricochet. Bystanders should stand behind the shooter.
<p>Blunt force trauma to the head is commonly used in the pig industry as a means of piglet euthanasia. The method has been proven to cause immediate death if performed correctly by trained, experienced stockpersons; however, due to the nature of the procedure, the Certification Body requires this practice be phased out by 2024. Although the practice is permitted in the interim, the Certification Body strongly encourages producers to choose one of the alternate methods of euthanasia suitable for piglets listed in this table.</p>		
Blunt force trauma	Up to: 5 kg (12 lb)	<p>When blunt force trauma is used:</p> <ul style="list-style-type: none"> ▪ Administer a strong blow to the top of the cranium using a heavy, blunt instrument. Bring the instrument to the piglet, not the piglet to the instrument. ▪ The blow must be swift, firm and with absolute determination to ensure it effectively euthanizes the piglet on the first attempt.
<i>Must be phased out by 2024.</i>		

- e) Pigs must first be properly held / restrained prior to being euthanized.
- f) Proper placement and aim of a gun or captive bolt device is very important because the brain is relatively small and well protected by sinuses. For swine, there are three possible sites: frontal, temporal and from behind the ear toward the opposite eye.

- A - Frontal site (gunshot or captive bolt): Placement is in the center of the forehead, slightly above a line drawn between the eyes. The bolt or free bullet should be directed toward the spine/tail.
- B - Temporal region (gunshot only)
- C - Behind the ear (gunshot only): Directed diagonally toward the opposite eye



Above diagrams from Shearer and Nicoletti (2011); republished with permission

- g) Confirm the pig has lost consciousness immediately after stunning. If animal did not lose consciousness or appears to be regaining consciousness, repeat the step used or use an alternate method listed in Section 7.1 d) before administering the kill step. Have the backup method on hand in case the first attempt fails.
- h) Confirm death immediately after administering the kill step and before moving or leaving the animal (e.g. lack of breathing, lack of heartbeat, dilated pupils). If the method of euthanasia employed is unsuccessful on the first attempt, it must be immediately repeated. See Recommendations and Guidance.
- i) Equipment and tools used to perform euthanasia must be cleaned and maintained according to the manufacturer's instructions to ensure they continue to function properly.
- j) All carcasses must be disposed of according to federal, provincial, municipal and/or territorial regulations.

Recommendations and Guidance

Fearful, aggressive or unmanageable animals may be controlled by sedation prior to euthanasia. Consult with your veterinarian prior to using sedation in combination with your euthanasia method.

Over time, carbon and/or animal matter can build up inside a penetrating captive bolt device and may hinder the velocity of the bolt or cause the gun to malfunction. It is recommended that captive bolt devices be cleaned daily when fired, and maintained to ensure they remain in good working condition. Consult the user manual for tips on how to properly maintain your device.

Confirming insensibility (loss of consciousness):

- An animal has NOT been successfully rendered insensible if it exhibits one or more of the following signs:
 - Rhythmic breathing
 - Vocalization
 - Attempts to get up or lift its head
 - Constricted or responsive pupils

- Blinks naturally like an animal that is alive and conscious
- Blinks when you run a finger along its eyelashes or touch its eyeball
- Moves its eyes around
- Responds to something painful, like pinching its nose
- Immediately following an effective shot from a penetrating or non-penetrating captive bolt device, pigs will exhibit tonic (muscle contraction) and clonic (muscle relaxation) movements. In the tonic stage, the body becomes very rigid and gradually relaxes. This stage is followed by clonic motion, or involuntary kicking/paddling of the limbs. For young piglets, clonic spasms occur first. For older pigs, tonic rigidity occurs first. These spasms are normal and do not indicate consciousness. On average, all leg spasms stop within 3.5 minutes.
- If an animal has been ineffectively stunned, repeat the procedure immediately.

Bleeding out:

- A method of killing animals that have been stunned by gunshot or a penetrating captive bolt device. Not to be used as the primary method of euthanasia.
- Use a pointed, very sharp knife with a strong blade. Blade length varies depending on size of the pig (should be at least 13 cm (5 inches) for grow-finish pigs).
- Insert the knife through the skin just behind the point of the jaw and below the bones of the neck of an animal that has been stunned and is already insensible. Bring the knife forward to sever the jugular vein, carotid artery, and windpipe.
- When properly performed, blood will flow freely and death will occur over several minutes.

Pithing:

- A method of killing animals that have been stunned by gunshot or a penetrating captive bolt device.
- Causes physical destruction of the brain and upper regions of the spinal cord and can be performed as a secondary kill step when bleeding out is undesirable for aesthetic or sanitary reasons.
- To pith an animal, insert a rod or similar long, slender tool through the hole in the skull left by a bullet or captive bolt. Move the rod / tool around to destroy the brain and spinal cord. This will result in death.
- Pithing rods are commercially available.

Confirming death:

- Check all of the following vital signs three minutes after the euthanasia method has been applied. If the pig shows any of these signs, repeat the euthanasia method or use another method:
 - Heartbeat: In a live animal, the pulse would be found at the left lower side of the animal's chest, just behind the elbow. A faint or irregular beat may occur after administration of the euthanasia method, but should not last more than 15 minutes. In a dead animal there should be a lack of heartbeat for more than 5 minutes.
 - Breathing: Observe the chest for movement. In a dead animal there should be a lack of breathing for more than 5 minutes. Note: Breathing may be slow or erratic in an unconscious animal.
 - Movement or muscle tone: none when dead
 - Response to painful stimulus, such as pinching the nose: none when dead
 - Vocalization: none when dead
-

- Blink reflex when the eyeball is touched: none when dead

7.2 Slaughter of Animals for Meat

The Certification Body will be phasing in a requirement that slaughter plants and farms that slaughter animals on site be assessed by a 3rd party auditor for adherence to the American Meat Institute's Recommended Animal Handling Guidelines and Audit Guide. Farms and plants that pass this audit will be certified for slaughter of animals.

APPENDIX A: SUMMARY OF REQUIRED RECORD KEEPING

- 1) Feed and water
 - a) Feed suppliers
 - b) List of feed ingredients
 - c) List of feed supplements
 - d) List of any additives to feed or water
 - 2) Environment
 - a) Natural lighting transition plan, if applicable
 - b) Weekly ammonia levels (per room) assessed at pigs' head height
 - 3) A Herd Health Plan and the following related records:
 - a) Purchase receipts for all vaccines, drugs and treatments (including homeopathic remedies) used.
 - b) Vaccination records detailing the type of vaccine and illness being vaccinated against
 - c) Treatment records detailing reason for medical treatment (e.g. lameness, parasites), resulting action taken (e.g. type of treatment, medication/homeopathic remedy used) and related medication withdrawal date. *Medication withdrawal dates must be recorded in the treatment record to ensure the animal does not leave the farm prior to completely withdrawing from medication. It is important to identify an animal undergoing treatment using livestock paints, markers or an ear tag for this reason.
 - d) Euthanasia records detailing the reason for euthanasia and method used
 - e) Instances of culling by euthanasia or shipment off farm must be recorded along with the reason
 - f) Birth records, including number born alive, stillborn and mummified
 - g) Mortality records including cause / reason, if known (see Section 4.4 – Monitoring Mortality Rates for further detail)
 - h) Records of lab testing or other diagnostics conducted to monitor herd health must be kept on file and may be requested by the Certification Body as part of the Herd Health Plan
 - i) Make all records available to the Validator during the on-farm assessment
 - 4) A Biosecurity Plan
 - 5) Farm System Design Plan & Maps
 - a) A farm map illustrating location of all facilities housing pigs and other animals, waste management facilities, manure and compost piles, location of water bodies/waterways, farm entrances, driveway, range areas, etc.
 - b) A barn map including dimensions and pen sizes, and location of feed and water equipment, windows, doors, ventilation units, etc.
 - 6) Herd inventory
 - a) Breed and number of all animals
 - b) Sources of all purchases and sales of animals – a complete audit trail from farm to final sale
 - c) Year-end inventories of animals
-

7) Transport

- 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 loading and transport
- c) Condemnations and dead-on-arrival records from the processor

8) Euthanasia

- a) Written on-farm euthanasia plan developed in consultation with a licensed veterinarian

Upon obtaining certification, Members will be expected to retain all records between one Annual Assessment and the next (minimum one year).

Record Keeping Forms

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.

Transition Plans & Phase-Ins/Outs

- Lighting (Section 3.8) - For barns that do not have a source of natural or full spectrum lighting, an implementation plan must be submitted to, and approved by, the Certification Body. The transition period cannot exceed 10 years.
 - Natural lighting (i.e. sunlight) – e.g. windows, doors, skylights, open-sided barns, etc.
 - Full spectrum lighting (i.e. daylight simulating bulbs)
- Blunt force trauma as a means of euthanasia (Section 7.1) - Use of this method must be phased out of practice by 2024.

APPENDIX B: BODY CONDITION SCORING GUIDE

Use finger/hand pressure on multiple areas (see below) to determine body condition score.

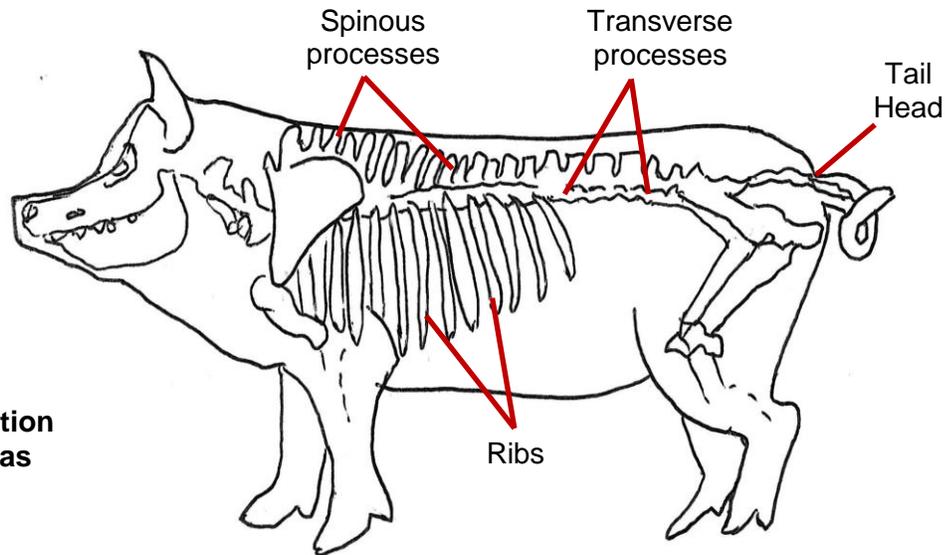


Figure B1.
Body condition
scoring areas

Table B1. Body condition scoring guide

Score	Approx. Backfat	Appearance	Condition
1	< 15 mm (< 0.6 in.)	Severe underconditioning (emaciated)	Individual ribs, spinous and transverse processes prominent. Deep cavity around tailhead. Deep depression in loin.
2	15-18 mm (0.6-0.7 in.)	Frame obvious (thin)	Individual ribs, spinous and transverse processes prominent but smooth. Slight fat cover. Shallow cavity around tailhead with some fatty tissue lining.
3	18-20 mm (0.7-0.8 in.)	Moderate, frame and covering well balanced (ideal)	Ribs covered but can be felt with pressure. Spinous and transverse processes rounded but can be felt with pressure. Muscle development full. No cavity around tailhead. May be slight depression in loin area.
4	20-23 mm (0.8-0.9 in.)	Frame not visible as covering (fat)	Spinous processes visible only as a line. Fat cover considerable but firm. Rib cage not visible and difficult to feel. Transverse processes cannot be felt. Tailhead rounded with fat. No depression in loin area.
5	> 23 mm (> 0.9 in.)	Severe overconditioning (obese)	Ribs, spinous and transverse processes not detectable. Fat cover dense and soft (may have hanging skin and fat). Tailhead buried under thick layer of fatty tissue.

Figure B2. Cross-section of the back illustrating body condition scoring palpation areas

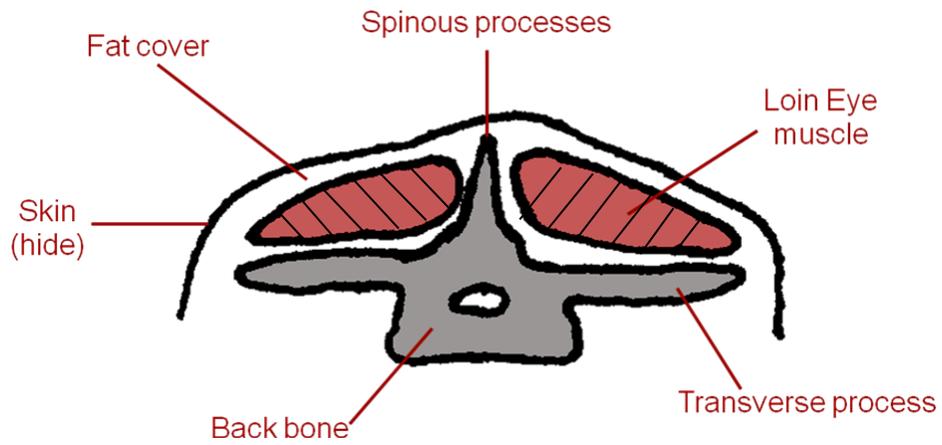


Figure B3. Diagram illustrating differences in body condition scores

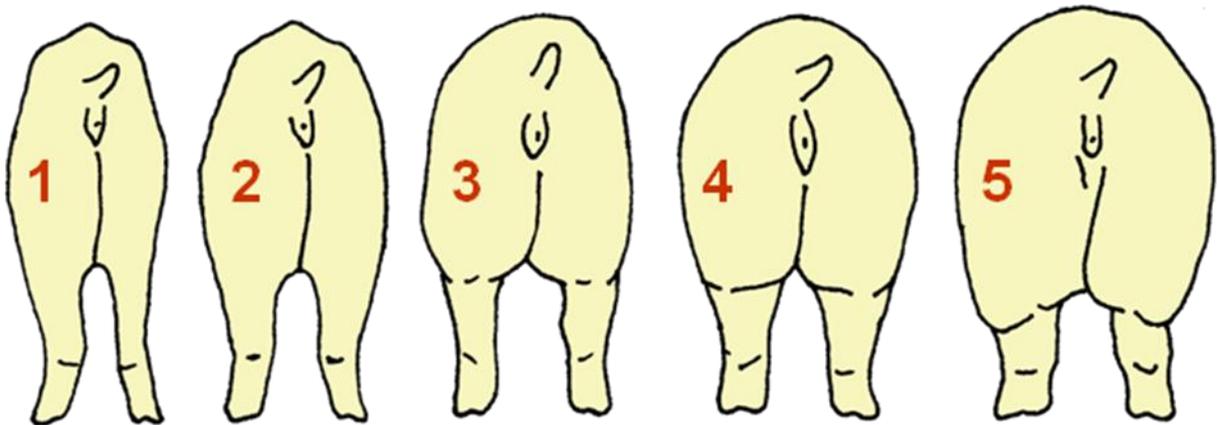


Figure B.4. Photos of pigs with varying body condition scores



Assess body condition score often, and at least at service, mid-gestation, farrowing and weaning for sows.

Table B.2 Optimal body condition scores for breeding pigs at different stages of production.

Animal Type	BCS
Sows (farrowing)*	3.0-3.5
Sows (lactating)	2.5-3.5
Sows (weaned)	2.5-3.5
Boars	3.0-4.0

* 80% of farrowing sows should score a 3.0

See Appendix I in the Pig Code of Practice (2014) for additional details on body condition scoring.

Photos and diagrams in Figures B.2, B.3 and B.4 from Coffey, Parker, and Laurent (1999); republished with permission.

APPENDIX C: LAMENESS SCORING GUIDE

Lameness Scoring Protocol for Pigs

- 1) Choose a point where pigs can be observed walking in a straight line on a flat, even, and dry surface. The observer should keep sufficient distance from the pigs so as not to startle them.
- 2) If a large group of pigs is grouped together, it will be difficult to observe individual pigs to assess lameness. Try to select a vantage point from which you can view individual animals well. If you are moving them to a new area, move them through a narrow gate or chute so that they can be separated out from each other as you view them from the side. This will make it easier to assess each individual.
- 3) Watch pigs walk at their own pace. Assess lameness from the side to be able to see the back arch, head movement, length of the stride, and evenness of the steps.
- 4) Tally the number of pigs scored as per the scoring sheet provided (page 36) and record the total number of pigs assessed. Calculate the percentage of pigs for each lameness score to determine the prevalence of lameness.

Creating a Good Lameness Scoring Environment

Creating an environment where a pig feels comfortable walking will optimize your lameness scoring ability. Scoring pigs during a familiar routine (e.g. weigh day) minimizes stress and allows for the most accurate assessment. Scoring can be done most accurately when pigs walk at a consistent pace in a straight line.

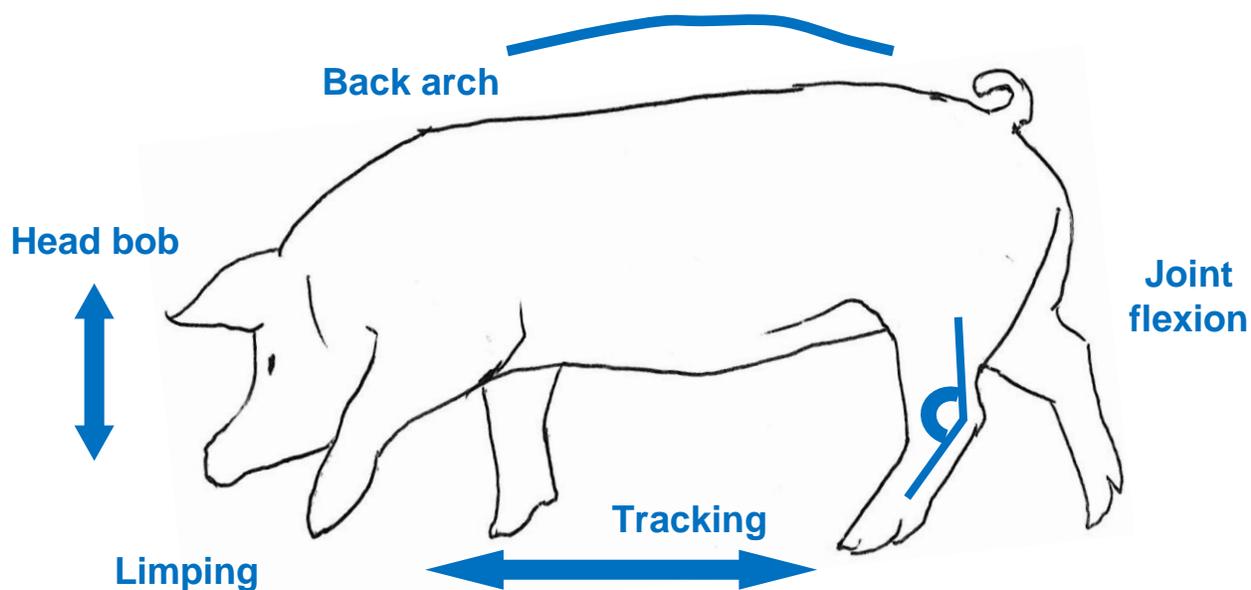
Interpreting Lameness Scores

- Score 1: Fit for transport.
- Score 2: Assess to determine course of action (e.g. medical treatment, cull). Fit for transport.
- Score 3: Requires medical treatment or send directly to slaughter/euthanize.
- Score 4: Requires medical treatment or euthanize. May haul a short distance if for veterinary treatment only.
- Score 5: If untreatable, euthanize animal or slaughter on-farm.

Score 3 may become worse during transport. Animals with a score of 4 or 5 are more likely to fall down and/or get trampled during transport. This may result in worsened lameness upon arrival at the final destination, or increased incidence of dead-on-arrivals.

Refer to the following two pages for behavioural signs of lameness and a scoring sheet.

Score	Description	Behavioural Signs
1	Not Lameness	Normal walking Smooth and fluid movement
2	Slight to Mild Lameness Imperfect movement but ability to walk not compromised	No limp Flat back Steady head carriage Smooth strides (tracking of front and back feet) Even steps Joints flex freely
3	Mild to Moderate Lameness Capable of movement but ability to walk is compromised Still able to keep up with a walking herd/group	Slight limp Arched back Steady head carriage Shortened strides Uneven steps Joints show signs of stiffness
4	Moderate to Severe Lameness Ability to walk is obviously diminished Unable to keep up with a walking herd/group	Obvious limp that is immediately identifiable Obviously arched back Head bob (jerky head movement up or down) Short and hesitant strides Uneven steps Stiff joints May stand with bent leg (avoids weight bearing)
5	Severe Lameness Ability to walk is severely restricted; must be vigorously encouraged to move	Inability to bear weight on one or more limbs Extremely arched back Obvious head bob Hesitant and deliberate strides Extremely uneven steps Obvious joint stiffness



SPCA Certified Lameness Scoring Form

Farm: _____ **Herd Size:** _____ **Breed:** _____

Score	Tally of Pigs Per Score	Total
1 (not lame)		
2		
3		
4		
5		
Total number of pigs observed (group size):		

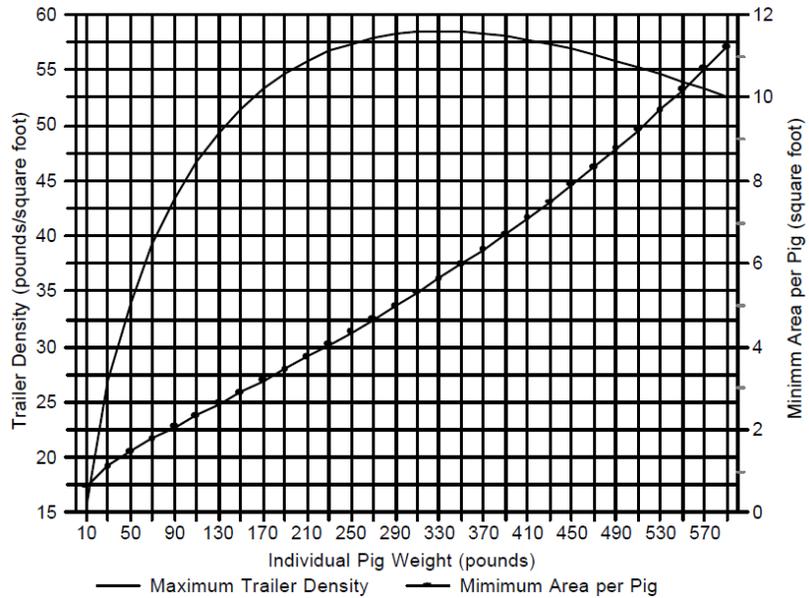
Lameness Prevalence

Score →	1	2	3	4	5
Total number of pigs					
% of pigs					

APPENDIX D: PIG MAXIMUM LOADING DENSITY CHARTS

Maximum Loading Density for Pigs

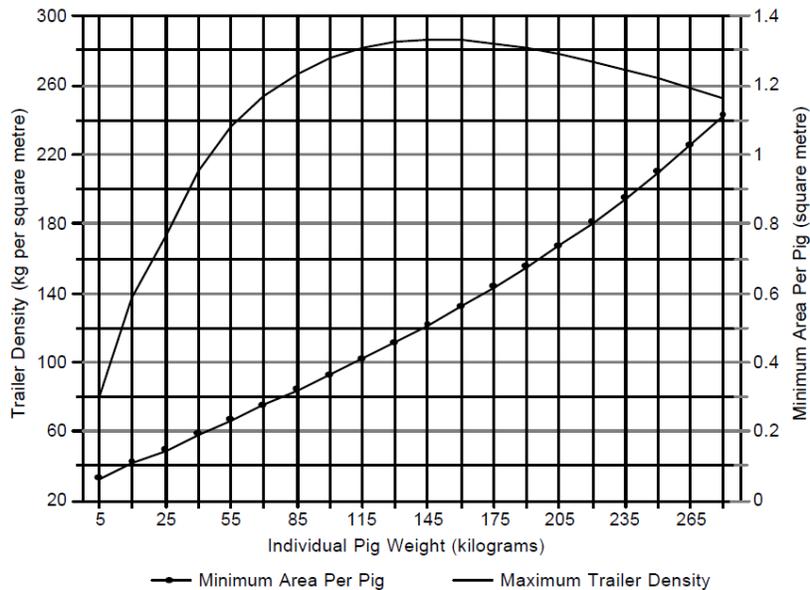
IMPERIAL



Minimum space allowance for swine in transit based on average individual body weight (imperial). The top line describes maximum trailer carrying capacity (left hand axis), minimum space per animal is the bottom line and right hand axis. A standard 102-inch wide trailer (8.3 feet internal width) carrying 250 pound pigs at 57 lbs/ft² would be carrying 475 pounds per running foot of deck. Reduce load by 25% in hot humid weather. Thin animals require more space than a finished animal of the same weight.

Maximum Loading Density for Pigs

METRIC

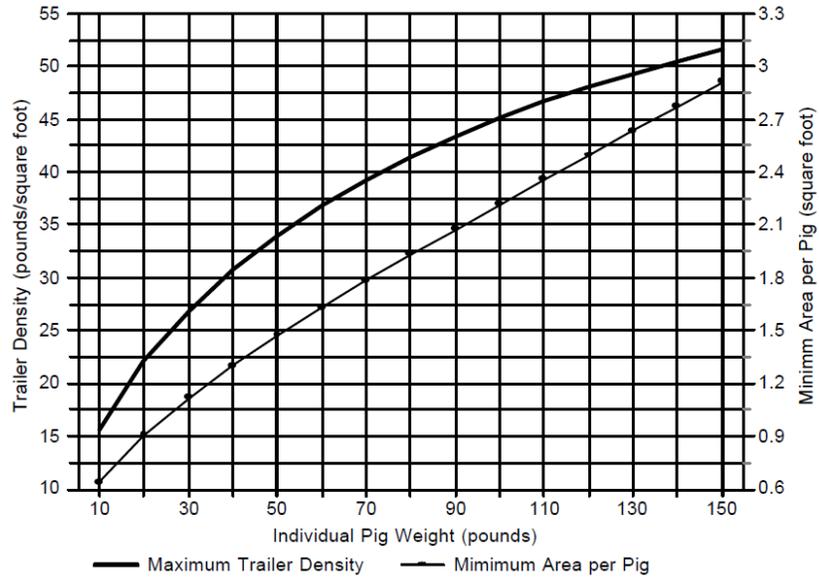


Minimum space allowance for swine in transit based on average individual body weight (Metric). The top line describes maximum trailer carrying capacity (left hand axis); minimum space per animal is the bottom line and right hand axis. Reduce load by 25% in hot humid weather. Thin animals require more space than a finished animal of the same weight.

Figures on this page were republished, with permission, from the *Recommended Code of Practice for the Care and Handling of Farm Animals – Transportation* (2001): pages 42-43.

Maximum Loading Density for Small Pigs

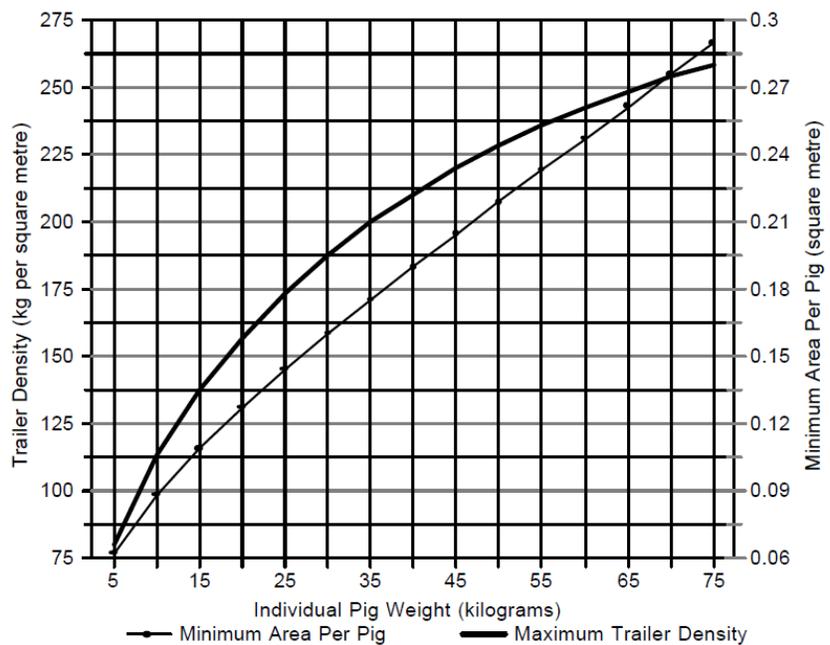
IMPERIAL



Minimum space allowance for young and cull swine in transit based on average individual body weight (imperial). The top line describes maximum trailer carrying capacity (left hand axis); minimum space per animals is the bottom line and right hand axis. A standard 102- inch wide trailer (8.3 feet internal width) carrying 50 pound pigs at 33 lbs/ft² would be carrying 275 pounds per running foot of deck. Reduce load by 25% in hot humid weather. Thin animals require more space than a finished animal of the same weight.

Maximum Loading Density for Small Pigs

METRIC



Minimum space allowance for young and cull swine in transit based on average individual body weight (Metric). The top line describes maximum trailer carrying capacity (left hand axis); minimum space per animal is the bottom line and right hand axis. Reduce load by 25% in hot humid weather. Thin animals require more space than a finished animal of the same weight.

Figures on this page were republished, with permission, from the *Recommended Code of Practice for the Care and Handling of Farm Animals – Transportation* (2001): pages 42-43.

APPENDIX E: DECISION TREE - SHOULD THIS PIG BE LOADED?

Updated 05/10

SHOULD THIS PIG BE LOADED? Guidelines for Transporting Pigs



Load Healthy Pigs

**Do Not Load
Do Not Transport**



Do Not Transport to a Sale or an Assembly Yard



Delay Transportation and Reassess

- dehydration
- fever (normal range 38.5°C to 39.5°C)
- sows that have farrowed within 48 hours, or likely to farrow during transport or upon arrival at market
- total blindness (consider on-farm slaughter)
- stressed pigs showing signs of:
 - exhaustion
 - heat stress
 - weakness
 - porcine stress syndrome



Euthanize

- Non-ambulatory, Lameness Class 4 & 5 (see reverse)
- fractures of limbs or spine
- any case where pigs are unable to eat or drink due to injury or disease
- chronic "poor-doers" or emaciated (extremely thin) pigs (see reverse)
- pigs suffering from severe non-responsive disease
- prolapsed uterus
- arthritis involving multiple joints
- nervous disorders, such as rabies must be reported to CFIA; contact your vet before euthanizing
- hernia that impedes movement, is painful, or touches the ground
- severe recent injury

Transport With Special Provisions Direct to Slaughter



As Soon As Possible

- abscess and local infections (no fever)
- recent prolapsed vagina or rectum
- Lameness Classes 1, 2 (see reverse)
- penile or vulva injury
- severe dewclaw injury
- first stage anorexia or weight loss (no fever)
- frost bite
- partial blindness
- severe tail bite or vulva bite
- smoke inhalation

These pigs must walk on their own and travel in a small compartment, individually or with one quiet pig.

Animals with multiple conditions may not be fit to transport.

Non-ambulatory animals: Unable to stand without assistance, or unable to move without being dragged or carried (downers). **Do not load or transport.**

Lame animals:

- Animals should not be loaded if at risk of going down in transit.
- Pigs that can't bear weight on all four legs may be in pain and are at risk of going down during transit. These pigs are often euthanized at sales and plants.

Emergency On-Farm Slaughter

If an animal is fit for human consumption but not fit for transport (i.e. injured but not sick) emergency on-farm slaughter may be an option. Please consult with your provincial government for more information on the availability of emergency on-farm slaughter in your province.

The chart on this page was originally published in *Should This Pig Be Loaded? Guidelines for Transporting Pigs* (2010). Permission to republish has been granted from Farm & Food Care Ontario.

Information on Dealing with Compromised Pigs

Federal Transportation Regulations

Health of Animals Regulations www.inspection.gc.ca

DO

- Ensure that animals segregated in trucks receive extra protection from cold and wind chill; supply ample bedding.
- Segregate boars, animals of different weights and ages, or if incompatible by nature.
- Provide proper ventilation, drainage and absorption of urine.
- Have sufficient headroom for animals to stand in a natural position.
- Either cover the vehicle floor with sand or have the vehicle fitted with safe footholds, in addition to appropriate bedding.
- Ensure that animals unloaded for feed, water and rest remain at least five hours and longer, if necessary, for all animals to receive food and water.
- Euthanize animals promptly as the conditions outlined on the reverse occur.

DO NOT

- Transport a sick or injured animal where undue suffering may result, or when the animal is liable to give birth during the journey.
- Continue to transport an animal that is injured, becomes ill, or is otherwise unfit to travel beyond the nearest place it can be treated.
- Use prods on the face, anal, udder or genital area.
- Load or unload animals in a way that would cause injury or undue suffering.
- Crowd animals to such an extent as to cause injury or undue suffering.
- Transport livestock in trailers not designed for safe handling of that species or class of livestock.

Source: Transporting Livestock by Truck (CFIA)

Lameness Classes

Transport as soon as possible

Class 1

Visibly lame but can keep up with the group.

Class 2

Unable to keep up; some difficulty climbing ramps. Load in rear compartment.

Do Not Load or Transport*

Class 3:

Requires assistance to rise, but can walk freely.

Class 4

Requires assistance to rise; reluctant to walk; halted movement.

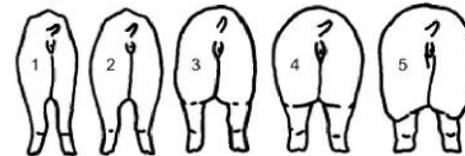
Class 5: Non-ambulatory

Unable to rise or remain standing.

*** Any animal, including Lameness Classes 3, 4 or 5 may be loaded for transport for veterinary treatment under veterinary supervision.**

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

Body Condition Scores of Sows



Score	Condition	Detection of ribs, backbone, "H" bones, and "pin" bones
1	Emaciated	Obvious
2	Thin	Easily detected with pressure
3	Ideal	Barely felt with firm pressure
4	Fat	None
5	Overly fat	None

Source: Assessing Sow Body Condition, Coffey, Parker, Laurent University of Kentucky



www.bcfacc.ca
(604) 287-3276



www.afac.ab.ca
(403) 932-8052



Farm Animal Council of Saskatchewan Inc.
www.facs.sk.ca
(306) 249-3227



Manitoba Farm Animal Council
www.mbfac.ca
(204) 632-9047



www.ofac.org
(519) 837-1326

Special thanks to the Ontario Humane Transport Working Group for their leadership on this resource. Funding for this project was provided in part through Agriculture and Agri-Food Canada's Advancing Canadian Agriculture and Agri-Food Program and the Ontario Ministry of Agriculture, Food and Rural Affairs.

The chart on this page was originally published in *Should This Pig Be Loaded? Guidelines for Transporting Pigs* (2010). Permission to republish has been granted from Farm & Food Care Ontario.

APPENDIX F: 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	25	millimetre	(mm)
foot	30	centimetre	(cm)
yard	0.9	metre	(m)
mile	1.6	kilometre	(km)
Area			
square inch	6.5	square centimetre	(cm ²)
square foot	0.09	square metre	(m ²)
square yard	0.836	square metre	(m ²)
square mile	259	hectare	(ha)
acre	0.4	hectare	(ha)
Volume			
cubic inch	16	cubic centimetre	(cm ³ , mL, cc)
cubic foot	28	cubic decimetre	(dm ³)
cubic yard	0.57	cubic metre	(m ³)
fluid ounce	28	millilitre	(mL)
pint	0.57	litre	(L)
quart	1.1	litre	(L)
gallon (Imp.)	4.5	litre	(L)
gallon (U.S.)	3.8	litre	(L)
Weight			
ounce	28	gram	(g)
pound	0.45	kilogram	(kg)
short ton (2000 lb)	0.9	tonne	(t)

APPENDIX G: REFERENCE MATERIAL

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