
Standards for Optimizing Animal Welfare Outcomes during Slaughter without Stunning

Version 2.06

For internal consideration only

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ALL WORDS IN *ITALICS AND UNDERLINED* IN THIS DOCUMENT ARE
DEFINED ON PAGE 13.

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Standards for Optimizing Animal Welfare Outcomes during Slaughter without Stunning

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Introduction

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- These standards are science based and are intended to improve *animal* welfare.
- *Pre-slaughter stunning* (including reversible stunning) renders an animal insensible yet alive. This is the best method to control anxiety, pain and suffering throughout slaughter.
- Where slaughter without stunning is permitted by regulation, care must be taken to achieve effective control and reduction of anxiety, pain and suffering for all animals throughout slaughter.
- If pre-slaughter stunning is not performed, immediate *post-cut stunning* is a best practice which will reduce the duration of animal suffering.
- These standards are based on best practices that should apply to all slaughter establishments, with or without stunning.

70 Scope

71 This document **includes** guidance on restraint, neck cutting and post cutting management.

72 This document **does not include** changes to existing, applicable provincial/federal regulations or
73 legislation.

74 If these words are used, they offer some flexibility:

75 **Recommend/encourage/should:** means the practice is viewed as best
76 practice, but other methods will be accepted as long as the goal of high
77 welfare is not jeopardized.

78 If these words are used, strict adherence is required:

79 **Prohibited:** means the practice described is banned.
80 **Must:** means the standard has to be adhered to as directed.

81 Best practices that apply to all slaughter facilities

- 82 1. The commitment by the operator/management to protecting animal welfare by having the
83 responsibility for the training, competency and validation of skills and ability of everyone
84 involved in the kill process.
- 85 2. The development and implementation of effective standard operating procedures (SOPs) and
86 training procedures to include measurable criteria of success, regular monitoring of procedures
87 and records of outcomes. Alternative solutions that achieve the same animal welfare outcomes
88 may be considered for very small plants.
- 89 3. Training programs for people who handle, cut, or stun live animals. Training programs include a
90 knowledge of animal behaviour and physiology, handling and restraint, signs of stress and pain,
91 and best practices for minimizing the time to loss of sensibility at slaughter, as well as
92 equipment maintenance, including knife sharpening;
- 93 4. Assurance that employees have the ability to recognize when an animal is insensible, when an
94 animal is possibly returning to sensibility, and when an animal is dead;
- 95 5. Ensure the welfare of animals at all times by the application of best practices and applicable
96 regulations to the transport, unloading, lairage, restraining, stunning and slaughter of animals;
- 97 6. Apply a monitoring program to verify that animals are calm at the time of slaughter and are not
98 subject to undue stress, pain or suffering during the handling, restraint, slaughter and bleed out
99 until death is confirmed, validating that the animal was cut or stunned effectively and bled out
100 rapidly;
- 101 7. Implementation of a system for rapid identification of failures to meet welfare standards and
102 timely implementation of corrective actions that include documentation of issues and corrective
103 actions taken to address specific and larger underlying problems.

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Restraint for slaughter without stunning

1. Each animal must be individually restrained, either manually or with the use of equipment;
2. All animals except birds must be restrained in an upright position for slaughter without stunning. Inverting animals for slaughter without stunning causes avoidable distress, pain and aspiration of stomach/rumen fluids;
3. Restraint equipment must be designed and constructed to suit the size, species and type of animal. It must be functional, properly maintained and used correctly.

Mammalian restraint

1. Effective and humane upright restraint systems are available for cattle, sheep and goats;
2. Animals must remain calm during the slaughter process;
3. If an animal is agitated and cannot be restrained for a proper cut, it must be stunned immediately;
4. Once restrained, animals must be slaughtered without delay (recommended within 10 seconds);
5. The restraining device, including both the body and head restrainers, must suit the size, species and type of animal being slaughtered;
6. The restraining device must be designed, located and used to enable:
 - secure footing for the animal,
 - *smooth, quiet operation of equipment*,
 - the animals to enter readily and without *coercion* (no use of nose tongs),
 - the animals to be held forward by a pusher or a similar restraining device,
 - the animals to fit comfortably into the forehead bracket and chin lift, or similar device, which:
 - applies only moderate pressure,
 - avoids excessive dorsal neck bend (backward bending),
 - adequate monitoring of the animal, including the head, for loss of *sensibility*,
 - adequate access to the head and the neck for accurate neck cutting and bleeding, application of the stunning equipment when required, and monitoring *sensibility* and death;
7. Nothing in the design, location or use of the restraining device must obstruct the flow of blood, including:
 - the closing of the edges of the cut,
 - contact of the neck cut with the restraint device,
 - overextension of the neck,
 - excessive restraint in the box,
 - excessive *agonal movements* that hamper bleeding.

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Bird restraint

1. The majority of birds are slaughtered with pre-slaughter stunning, and this is encouraged;
2. It is not acceptable to shackle birds unless they are being electrically stunned prior to cutting.
3. Shackling birds for slaughter without stunning, before the neck cut is made, results in avoidable pain and suffering, and is not acceptable;
4. The best practice for bird restraint during slaughter without prior stunning, is for one person to hold the bird while another person (the slaughter person) performs the cut;
5. Shackles or post-cut restraining devices when applied (e.g., cones), must suit the type, size and species of bird;
6. Proper restraint must continue through the initial bleed out. Some birds can retract heads and necks after cutting if proper restraint is not present. This can impede blood flow and avoidably prolong the time to loss of consciousness.

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Neck cutting in slaughter without stunning

1. A trained competent individual must carry out the cut;
2. The knife should be at least twice as long as the width of the animal's neck;
3. The knife must be sharp for each animal and the slaughter person must receive training in how to sharpen a knife and keep it free of nicks;
4. The animal must not be restrained until the slaughter person is ready to perform the cut, and the neck cut must be performed without any delay;
5. The cut must be a single pull stroke of the knife in all circumstances except if required with large ruminants this can be extended into a single pull and a push stroke. At no time must the knife be removed and reinserted, and under no circumstances may the cut be more than a single pull and single push movement without interruption. Stabbing with the knife point and poking or sawing are not permitted;
6. Blood loss must be rapid enough to cause a rapid loss of sensibility;
7. Procedures that could cause distress or pain and suffering (including palpation, second cuts, tissue collection) must not be done until the animal is insensible;
8. Animal welfare and the loss of sensibility must be monitored for every animal through cutting and bleeding until death;
9. Back up stunning equipment and methods must suit the size, species and type of animal. It must be applied correctly, and it must have proper maintenance as stunning must be performed safely and rapidly, if required to protect animal welfare.

Bovines should be stunned immediately if they do not collapse or lose sensibility (i.e., lose posture) within 30 seconds post cut. Small ruminants should be stunned immediately if they do not collapse or fail to lose sensibility in 15 seconds.

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Post-cut management of animals slaughtered without stunning

All animals must be insensible before they are moved or manipulated.

Slaughter without stunning does not have a step that results in instantaneous insensibility, therefore:

1. Animals will require a longer time to become insensible;
2. Animal welfare should never be compromised to increase speed;
3. Animals must be monitored for loss of sensibility;
4. Back up stunning equipment must be readily available and in good working order at all times. Birds can be rapidly decapitated in the event of a poor cut;
5. Bovines should be immediately stunned if they do not collapse or fail to lose sensibility within 30 seconds. Small ruminants should be stunned if they do not collapse or fail to lose sensibility in 15 seconds;
6. Animals must be insensible before a hand or any object is placed in the wound. If bleeding is accidentally being prevented, stunning must be applied before correction measures are applied;
7. Animals must be insensible before the restraining device is released, unless required to apply a stun post-cut;
8. Animals must not be wholly or partially suspended by any means until the animal has lost sensibility;
9. Dressing procedures must not be performed on an animal that shows signs of a possible return to sensibility.

**Regardless of the choice of slaughter technique,
sensible animals are prohibited on the bleed line.**

276 **Signs of loss of sensibility at slaughter**

277 The time to loss of consciousness varies between species and among individual animals. Therefore,
278 slaughter persons need to identify when each animal has lost sensibility.
279

280 **Mammalian signs of loss of sensibility**

- 281 1. No rhythmic breathing;
- 282
- 283 2. No natural blinking, tracking moving objects or eye movements including nystagmus;
- 284
- 285 3. Permanent loss of muscle tone and righting reflex;
- 286
- 287 • A righting reflex is seen when an animal attempts to retain or regain upright body posture.
- 288
- 289 4. No vocalization (grunting, groaning);
- 290
- 291 • For slaughter without stunning: the larynx (voice box) is severed from the trachea, so
- 292 vocalization per se is not possible. However animals that show vocalizing behaviors after
- 293 the cut (e.g., mouth open, neck extended, tongue rolled) must be stunned even if no other
- 294 signs of sensibility are observed.
- 295
- 296 5. Floppy head (“rag doll –like”).
- 297 • Loose tongue
- 298 • Controlled tongue or lip movements are signs of potential return to sensibility
- 299
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301 **Bird signs of loss of sensibility**

302 The majority of birds are processed with reversible pre slaughter stunning to ensure they are
303 temporarily insensible at the time of the cut.
304

305 The following signs and combinations of them can indicate that a bird has fully lost sensibility during
306 slaughter without stunning. Birds should be observed 12 to 15 seconds post cut to confirm loss of
307 sensibility.
308

- 309 1. No observed natural blinking;
- 310
- 311 • If the eyelids are open, there is no movement of the nictitating membrane (third eyelid)
- 312 • If the eyelids are closed, there is no movement of the eyelids or obvious eye movement
- 313 under the eyelids
- 314
- 315 2. No rhythmic breathing;
- 316
- 317 3. No vocalization;
- 318 • Birds that show vocalizing behaviors after the cut (e.g., beak open, neck extended) must be
- 319 stunned even if no other signs of sensibility are observed
- 320
- 321 4. No swallow reflex.
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324 **Best Practices for stunning during slaughter**

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326 **General recommendations:**

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- If animals are being stunned, operators need to refer to the appropriate best practices to ensure that stunning is performed properly.

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Definitions of words that are in italics and underlined in the document

Pre Slaughter Stunning – There are two kinds of stunning, **reversible** (gas inhalation, anaesthesia and head only electric stunning) and **irreversible** (captive bolt or head to cardiac electric stunning). Inversion of the bird is required to complete the electrical circuit with water-bath electrical pre slaughter stunning.

Sensibility – a state of awareness, able to feel pain and/or to respond to touch, sound and/or what is seen

Lairage – animal handling facilities at abattoirs, including loading ramps, laneways, weigh-scales, holding areas for animals in crates, pens, water facilities and feed bunkers

Coercion – forcing an animal using a painful or stressful procedure, so it has no option but to comply without enduring more pain or stress

Smooth, quiet operation of equipment – operation of equipment without jerky movements, hissing or loud noises

Rhythmic Breathing – in and out breathing pattern of more than two movements, commonly accompanied by flaring of the nares and expansion of the chest wall.

Agonal breathing – reflex open mouth gasping that occurs when the brain is dying due loss of blood and oxygen (gasping that occurs without the movement of the ribcage)

Agonal movements – the twitching and jerking reflex movements as an animal is dying

Nystagmus – rapid movement of the eyeball in any direction (side to side, up and down, or in a circular pattern)

Back up stunning equipment and stunning methods – equipment that is kept ready and available for use if the primary method does not work properly

Post-cut stunning – the process of routinely stunning animals immediately after they have been cut; this action can reduce suffering in animals that are cut but not stunned