Chapter 7.5 – ANIMAL WELFARE DURING SLAUGHTER

Antonio Velarde Animal Welfare Program Chair WOAH ad hoc group



Members of the group

- Dr Maria Ferrara
- Dr Denis Simonin
- Dr Marien Gerritzen
- Prof Dr Zulkifli Idrus
- Dr Awis Qurni Sazili
- Dr Cia L. Johnson
- Dra. Marcia del Campo Gigena
- Dr Craig Brian Johnson
- Dr Antonio Velarde
- Dr Leopoldo Stuardo (WOAH)
- Elizabeth Marier (WOAH)





Duration

1st meeting: April 2018

8th meeting: October 2022







✓ Free-moving animals

✓ Animals in containers



Scope

Arrival and unloading
Lairage
Handling
Restraint
Stunning and bleeding





- 1. Animal welfare concerns
- 2. Animal-based and other measures
- 3. Recommendations
- 4. Species-specific recommendations



Animal welfare concerns

Hazard	Welfare Consequences
FACILITIES AND STRUCTURES	
Slippery floors, high slopes	Handling stress General fear
High temperature, high humidity, high stocking density	Thermal stress
MANAGEMENT	
No access to water, dry hot weather	Prolonged thirst
Mixing, high stocking density,	Injuries
Electrical goads	Pain induced by management procedure



Animal-based measures (ABMs)

- Measure the actual effect on the animals
- Higher validity
- Lower reliability and feasibility

Welfare consequence	ABMs
Thermal stress	Shivering, huddling, panting
Handling stress	Slipping, falling
Sensory stress	Reluctant to move, turning back



Handling

1. Animal welfare concerns

- Inappropriate equipment
- Inappropriate handling and forced physical movement
- Exposure to novel environments (e.g. noise, lighting, flooring, smell)

2. Animal-based and other measures

- Slipping, falling and piling up
- Animals with broken or injured limbs
- Turning-back, attempting to escape and or reluctant to move



Handling

3. Recommendations

- Ramps or lifts should be provided
- No gap between the vehicle and the unloading dock
- The gradient should not be too steep
- Design of the facilities should promote the natural movements of animals, and, as far as possible, minimise human interaction.
- Electric goads should only not be used on a routine basis
- 4. Species-specific recommendations



Electrical water-bath stunning for poultry

1. Animal welfare concerns

- Inverted and shackled by the legs
- Lack of contact between head and water,
- Differences in individual bird resistance,
- Improper system grounding,
- Pre-stun shocks
- Inappropriate electrical parameters (low voltage/current or high frequency

2. Animal-based and other measures

- Slipping, falling and piling up
- > Animals with broken or injured limbs
- Turning-back, attempting to escape and or reluctant to move

BREATHING

Presence of either a minimum of two movements of the beak or abdominal muscles around the cloaca associated to breathing

SPONTANEOUS SWALLOWING

Deglutition reflex triggered by water from the stunner or blood from the neck-cutting wound entering the mouth during bleeding.

https://www.eurcaw-poultry-sfa.eu/en/minisite/sfawc/webinar-assessmentconsciousness-after-waterbath-stunning-broiler-chicken-0



WING FLAPPING

Flapping with both wings and should not be confused with rapid trembling of the entire body of the bird

HEAD SHAKING

Bird shakes its head from side to side to get rid of blood or water entering the nostrils.

Generalitat de Catalunya

Electrical water-bath stunning for poultry

3. Recommendations

- Optimum combination of voltage and frequency
- Contact between water and head, as well as between the legs and the leg shackle
- In the case of ineffective stunning or recovery, birds should be restunned immediately using a backup system and be killed immediately.

4. Species-specific recommendations

- > Effective electrical parameters, should be based on scientific evidence for different types and species of birds.
- Recommended frequency and minimum parameters [EFSA, 2019]
- > Ducks, geese and quails should not be stunned at frequencies higher than 200 Hz.
- > Chicken and turkeys should not be stunned at frequencies higher than 600 Hz.



Training and competency of personnel

Animal handlers and other personnel have a crucial role to play in ensuring good animal welfare conditions

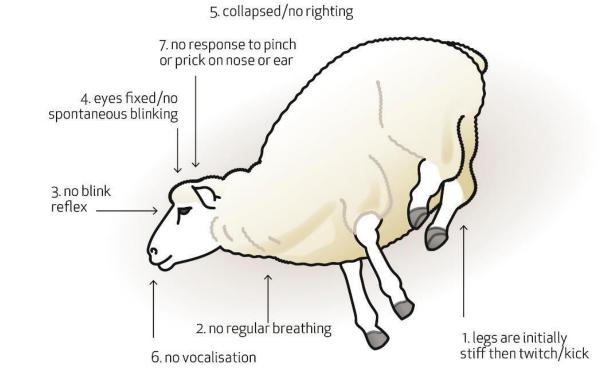
- Attitude and knowledge of the personnel
- Training
- Instructions for each procedure
 - $\checkmark\,$ Handling and moving
 - ✓ Restraining of animals
 - ✓ Stunning and bleeding operations
 - ✓ Emergency killing (when, where, how)



Training and competency of personnel

Identify and take corrective actions in case of:

- a) Ineffective stunning of the animal
- b) Recovery of consciousness
- c) Animal is still alive signs of life prior to dressing or scalding





Chapter 7.5 - ANIMAL WELFARE DURING SLAUGHTER

- Identifies welfare concerns and potential hazards for arrival and unloading, lairage, handling, restraint, stunning and bleeding.
- > Provides **animal-based measures** to assess the level of welfare.
- Provides general and species-specific recommendations.
- > Applies to free-moving animals and animals in containers.
- The principles underpinning these recommendations should also be applied to the slaughter of other species and those slaughtered in other places.
- This chapter should be read in conjunction with the guiding principles for animal welfare provided in Chapter 7.1., Chapter 7.14. killing of reptiles for their skins, meat and other products and with relevant provisions of Chapters 6.2. and 6.3.





World Organisation for Animal Health Founded as OIE

Thank you for your attention

antonio.Velarde@irta.cat



