

Good practice in reducing slipping and falling can improve hide cleanliness and carcass hygiene

FACTSHEET 8

Good practices such as those required under conformance and quality management programs, place significant emphasis on animal handling and infrastructure to prevent slipping and falling, thereby improving hide cleanliness and carcass hygiene.

Key points

- Animal hide, particularly faecal-contaminated hide, is a source of carcass contamination during slaughter.
- Slipping and falling dramatically increase the microbial load of cattle hides and sheep fleeces.
- Flooring in pens, laneways, races and ramps should be constructed with materials that minimise slipping, falling and injury.
- Pre-slaughter visual evaluation of animal hide cleanliness can be an effective aid to reduce contamination of carcasses and deliver improved food safety and hygiene.
- Visually clean hides generally result in more hygienic carcasses.

Why hide cleanliness is important

Hide surfaces are recognised as a primary source of carcass contamination during slaughter and de-hiding procedures. In fact, in some instances, a filthy cattle hide will carry more food-borne pathogens than faeces.

Increasing amounts of filth on hides increases the transfer of bacteria to the carcass surface, especially when the filth is loosely attached and wet. In general, the wetter the hide of the animal, the greater the carcass coliform count.

Less slippage and falling will reduce the level of dirt, dung and organic matter adhering to the hide resulting in less contamination of carcass. Pre-slaughter visual evaluation of animal hide cleanliness can be an effective aid to reduce contamination of carcasses and deliver improved food safety and hygiene. Cleaner carcasses and lower carcass microbial counts ensure increased food safety and increased ability for longer ageing of meat without spoilage.

Good practices required by conformance or quality management programs improve hide cleanliness

Good practices required under conformance or quality management programs which place significant emphasis on animal handling and infrastructure to prevent slipping and falling (where the animals body touches the floor), thereby improving hide cleanliness and carcass, include:

- Requirements that infrastructure be designed and maintained to eliminate slippery surfaces and hazards.
- Requirements that handling be conducted calmly and expertly by trained handlers to minimise animal responses that may lead to slipping and falling.
- A requirement that lairage area flooring be kept clean to minimise livestock slipping or falling.
- Internal audits which include measuring slips and falls. For example, scoring 100 animals from the crowd pen, lead-up race and stunning box (measure a percentage of 100 animals in each section) and mark: X = no slipping or falling, F = fell, S = slip.
- No more than 3% of animals are observed to be slipping and no more than 1% of animals are observed to fall, otherwise corrective action is taken.

Good infrastructure and facilities mean less slipping and falling which improves hide cleanliness and carcass hygiene

Benefits of good practice

Good practices such as those required by conformity assessment and quality management programs help keep animals as clean as possible during the lead up to slaughter and prevent hides from becoming dirty. This avoids the situation where animals may be rejected from being admitted to the slaughter floor during the ante-mortem inspection due to excessive filth. In these instances, such animals may be required to be cleaned prior to slaughter which is costly and potentially stressful, delivering a poor animal welfare outcome and possibly leading to further losses from dark cutting. Preslaughter washing should be avoided unless absolutely necessary.

Procedures to reduce slipping and falling and improve carcass hygiene will deliver additional benefits associated with improved food safety and shelf life as well as reduced bruising and spoilage.



Good infrastructure and handling can deliver clean hides

Further reading

- *Factsheet 1: Good practice can reduce dark cutting for better meat quality and higher returns*
- *Factsheet 2: Good practice can reduce stress and improve eating quality*
- *Factsheet 3: Good practice can reduce acute stress and water loss from meat*
- *Factsheet 4: Good practice can reduce bruising resulting in less trimming and less carcass wastage*
- *Factsheet 5: Good practice delivers benefits from improved infrastructure*
- *Factsheet 6: Good practice can reduce animal stress and shrinkage for increased profits*
- *Factsheet 7: Good practice in the provision of quality feed and clean fresh water can improve growth rates and eating quality*
- *Factsheet 9: Good practice avoids mixing unfamiliar livestock which can reduce stress and improve eating quality*
- *Factsheet 10: Good practice in traceability delivers health and safety control and improves management decisions*
- *Factsheet 11: Good practice reinforced through training*
- *Factsheet 12: Support and training in good practice*
- Blackshaw JK, Blackshaw AW and Kusano T (1987). *Australian Journal of Experimental Agriculture* 27: 753.
- Hauge SJ, Nafstad O, Røtterud OJ, and Nesbakken T (2012). *The hygienic impact of categorisation of cattle by hide cleanliness in the abattoir*. *Food Control*, 27(1), 100-107.
- McEvoy JM, Doherty AM, Finnerty M, Sheridan JJ, McGuire L, Blair IS, McDowell DA and Harrington D (2000). *The relationship between hide cleanliness and bacterial numbers on beef carcasses at a commercial abattoir*. *Lett Appl Microbiol*, 30(5), 390-395.