BroilerNet Factsheet AW2-C1-4

Evaluation of Injuries/culls at the Slaughterhouse (Animal-Based Measure)

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Using slaughterhouse animal-based measures to assess and improve on-farm animal welfare

The evaluation of injuries and culls at the slaughterhouse provides a reliable and objective way to assess the welfare status of broiler chickens at the end of the production cycle. As animal-based measures (ABMs), these indicators reflect the conditions experienced by the animals on-farm, including handling practices, housing quality, and health management. By systematically collecting and analysing this data, farmers can identify recurring issues, trace them back to specific practices, and adjust their management accordingly. This feedback loop is a powerful tool to complement on-farm observations, strengthen animal welfare monitoring, and drive continuous improvement. Incorporating slaughterhouse data into regular welfare assessments helps producers move from reactive to proactive welfare management, aligning with both regulatory expectations and societal concerns.

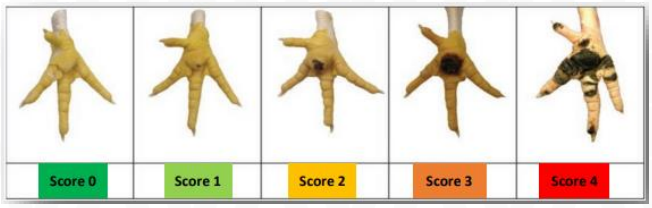


Figure 1. Illustration of footpad dermatitis scores based on lesion size and severity, according to © A. Butterworth, University of Bristol

What is measured and how?

Some slaughterhouses practice both ante-mortem and post-mortem assessments to evaluate the on-farm welfare conditions of broiler chickens. Ante-mortem inspections, conducted upon arrival at the slaughterhouse, include sampling animals from transport crates to identify cases of suffocation, heat stress, and poor loading practices. The condition of the flock (*e.g.*, presence of manure) is also assessed. This step includes reviewing the food chain information sheet from the farmer, which reports key data from the previous 30 days and must be submitted 24–48 hours before slaughter. Post-mortem evaluations include manual inspection of carcasses for bruises, footpad dermatitis, tarsal burns, and other lesions. In more modern slaughterhouses, camera systems allow for automatic scoring of 100% of birds for certain criteria like footpad dermatitis and weight. Additional parameters such as batch uniformity, cull rates, and *Salmonella* testing are also recorded, with results systematically communicated to the farmer.



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Number of animals involved in the procedure

The number of animals evaluated depends on the measure and the level of equipment at the slaughterhouse. Some indicators are based on full-batch assessments, especially when camera systems are installed (e.g., for footpad dermatitis). Others rely on sampling protocols, such as 50 birds per sample for assessment and scoring of scratches, wing damage, scabbed keel bones, leg deformities, and hock burns, with two samples per 8,000 birds per batch. Manual evaluations during post-mortem may cover only a portion of the birds, depending on the slaughterhouse's capacity and staff availability. In contrast, ante-mortem inspections typically involve all batches arriving from each farm, but may be limited to a representative number of birds from transport crates. The sample size therefore varies, but tends to increase with automation and modernisation of slaughterhouse infrastructure.

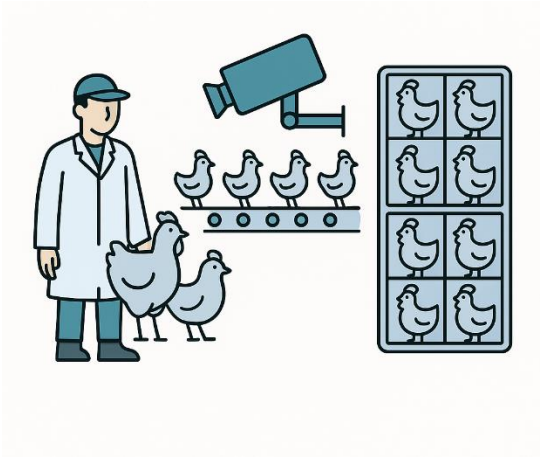


Figure 2. The automatic system for Animal-Based Measures.

Welfare benefits and on-farm improvements

Slaughterhouse ABMs provide farmers with objective feedback on the outcome of their management practices, serving as a critical link between on-farm conditions and animal welfare indicators at the end of the production cycle. This data helps identifying and correct issues related to handling, health, transport, and housing conditions. Farmers who receive and analyse these results can make targeted changes — such as improving litter quality, adjusting transport conditions, or upgrading equipment — to reduce lesions and stress of their animals. In the long run, this supports better health, lower mortality, and more homogeneous flocks, all of which contribute to higher welfare standards and can even lead to economic bonuses for improved performance.

Recommendations and points of vigilance

While not yet widespread in all slaughterhouses, the use of ABMs is becoming increasingly common, especially in modern facilities. To fully benefit from this practice, farmers must take the time to carefully review the slaughterhouse reports, paying close attention to indicators of bruising, foot lesions, and other signs of welfare issues. Engaging in regular dialogue with the slaughterhouse can help interpret the results and guide improvements. By treating these reports not just as administrative documents but as management tools, farmers can significantly enhance welfare outcomes in their farms.

For more information on animal-based measures at the slaughterhouse for broiler chicken, please refer to this EFSA article:
https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/sp.efsa.2021.EN-7075

Publication date: 13-06-2025 *Version:1 (EN)*

Funded by the European Union

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No101060979. It reflects only the authors view. The European Commission is not responsible for any use that may be made of the information it contains.