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Welfare of day-old chicks transported in containers

Disclaimer

- This plain language summary (PLS) is a simplified communication of EFSA's *Opinion on the welfare of domestic birds and rabbits transported in containers* focussing on day old chicks
- The purpose of this PLS is to enhance transparency and inform interested parties on EFSA's work on the topic using simplified language.
- Anyone interested in the more in-depth assessment and analysis should consult the full EFSA opinion, which can be found here.

Animal welfare during transport – an overview

- The safety of the food chain is directly connected to the welfare of animals, particularly those farmed for food production, due to the close links between animal welfare, animal health, and food-borne diseases.
- Stress factors and poor welfare can lead to increased susceptibility to transmissible diseases among animals.
- Good animal welfare practices not only reduce unnecessary suffering but also help to make animals healthier.
- In the framework of its Farm to Fork Strategy, the European Commission (EC) is undertaking a comprehensive evaluation of the animal welfare legislation, including the transport regulation (Council Regulation (EC) No 1/2005).
- This legislation on the protection of animals during transport is based on a scientific opinion adopted in 2002.
- EFSA and the EFSA Animal Health & Welfare (AHAW) Panel have previously published opinions in the topic of the welfare of animals during transport in 2002, 2004, and 2011.

What has EFSA asked the AHAW Panel to do?

- The EC requested EFSA to provide an independent view on the protection of animals during transport.
- The animals in question include cattle, sheep & goats, pigs, horses, and caged species (poultry and rabbits).
- This opinion focussed on the animals transported in containers and includes three main animal categories:
    - Domestic birds: focused on broilers, turkeys and end-of-lay hens.
    - Day-old chicks.
    - Rabbits.

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How did EFSA carry out this work?

- The Panel followed EFSA's methodological guidance for the development of animal welfare mandates in the context of the Farm to Fork Strategy.
- Relevant peer reviewed and grey (non-peer-reviewed) literature on current practices on transport of the animal categories and species of interest was analysed, as well as animal movement statistics from the EU's TRACES database.
- Assessment was performed in terms of welfare consequences, animal-based measures (ABMs), and hazards leading to welfare consequences.
- EFSA experts' opinion was used to select and assess the most relevant welfare consequences and develop recommendations to prevent hazards and to correct or mitigate welfare consequences during transport, including quantitative thresholds for microclimatic conditions within the means of transport and for spatial thresholds (minimum space allowance).

What are the main general outcomes?

- Poultry constitutes about 97% of the total intra-EU trade of live animals.
- More than 1.4 billion poultry were transported between Member States (MSs) per year in 2018 and 2019.
- Road transport accounted for 99% of total transports of poultry between MSs in 2018 and 2019.
- On occasions, day-old chicks were transported by air.
- Around half of the journeys of poultry reported had a duration of less than 4 hours.
- Around 180 million farmed rabbits were reared for meat consumption in the EU in 2016, 119 million (66%) of which were kept in commercial farms and transported for slaughter.
- Specific ABMs were identified for each of the highly relevant welfare consequences, including behavioural, clinical, and physiological ABMs.

What are the main outcomes for day-old chicks?

- The occurrence of each type of welfare consequence varied depending on the stage, means, and duration of transport.
- Day-old chicks of high genetic value (grandparents, great-grandparents) are transported very long distances and therefore by plane.
- Air transport contributes to additional hazards that can adversely affect chick welfare before, during, and after flights.
- Due to the lack of environmental control (mainly climatic environment) during the holding stages preceding and following flights (loading/unloading/waiting), more detrimental welfare consequences may take place welfare than during the flights themselves.
- The upper limit of the comfort zone of day-old chicks is estimated to be 35°C (near the chicks). Below this threshold, day-old chicks will not experience heat stress during transport (comfort zone) (with 66-100% certainty).
- The lower limit of the comfort zone of day-old chicks is estimated to be at 30°C. If the effective temperature is below this threshold, the chicks will experience cold stress.
- Day-old chicks subject to feed and water withdrawal periods longer than 48 hours will be at risk of experiencing severe prolonged hunger (with 90-100% certainty) and thirst which is detrimental to their welfare.

What were the limitations of the currently available data?

- Several sources of uncertainty were identified during the assessment:
  - Transport as a complex stressor has been studied much less compared to housing or other animal welfare factors especially under European conditions.
  - Lack of documented ABMs that can be used for analysis.
  - Lack of available relevant studies under recommended conditions.
  - The time available for the literature search and analysis was restricted.
  - A limited number of experts were selected based on their knowledge of day-old chick welfare.

- The AHAW Panel considered these sources of uncertainty associated with the assessment methodology and inputs and their impact on the study's outcomes and implications.
- For each of the conclusions listed below, the AHAW Panel reported their uncertainty qualitatively.
- Where possible, the impact of uncertainty was quantified and reported for those conclusions, typically involving quantitative thresholds, which could be the subject of risk management decisions.
- For a complete report on the Panel's expressed uncertainties, please consult the full opinion.
- For other animal categories such as quail, geese, and game birds, available data and evidence in literature are scarce and therefore the AHAW Panel only considered to which extent the conclusions and recommendations of the most studied species were applicable.

General implications and recommendations

- To reduce the impact of transportation on animal welfare, greater space, lower temperatures, and reduced journey duration are required, compared to current rules and practices.
- The concept of fitness for transport should be properly defined, including guidelines and thresholds based on ABMs.
- Involved professionals should be well educated and trained and vehicles properly maintained.
- Questions on responsibility between the involved groups should be clarified.
- The proportion of dead-on-arrival animals should be investigated when it exceeds 0.1% in day-old chicks.

Key implications and recommendations for domestic day-old chicks

- The only way to avoid the welfare consequences during transport is to not transport chicks and have the fertilized eggs transported and hatched on farm.
- To prevent day-old chicks experiencing prolonged hunger and thirst, the maximum time before first access to feed and water (including time spent in the hatchery, holding time, loading, transport and unloading time) must not exceed 48 hours. This time should be measured from the first chicks to hatch until the last chick has access to feed and water.
- It is recommended to keep day-old chicks in an environment where temperature is not below 30°C.