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Welfare of domestic birds 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 domestic birds.
- 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).
- The development of welfare consequences over time were assessed in relation to maximum journey time.

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 domestic birds?

- The occurrence of each type of welfare consequence varied depending on the stage, means, and duration of transport.
- Cold stress is a particular problem for end-of-lay hens that have minimal body fat and are often poorly feathered.
- The main conditions rendering domestic birds unfit for transport are evident signs of illness, cachexia, severe lameness (unable to stand or walk more than a few steps), open wounds and prolapse, poor feather cover in low effective temperatures, fractures (legs, wings, etc.), dislocations, and wet plumage in low effective temperature.
- Wet plumage is not a risk for ducks and geese.
- End-of-lay hens with poor feather cover are unfit to travel if they are to be transported in cold weather without the application of preventive and corrective measures.
- During loading, inversion and carrying birds by the legs increases the severity of handling stress and the risk of injuries (dislocated joints, fractures in legs or wings and bruises) compared to handling birds in an upright position.
- If the Apparent Equivalent Temperature (AET, – combining temperature and relative humidity inside the containers) is below 40, domestic birds, including end of lay hens, will not experience heat stress during transport (safe zone).
- AET values between 40 and 65, there will be in increasing risk of heat stress (alert zone).
- AET above 65 will result to less effective birds' mechanisms to cope with heat stress and are likely to experience heat stress (danger zone).
- The total feed withdrawal starts when feed is removed on farm and ends when all animals are removed from containers following unloading from the vehicle and fed or slaughtered.
- Domestic birds subject to feed withdrawal periods longer than 12 hours will experience prolonged hunger as well as intestinal cell breakdown.

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 domestic bird 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 all domestic birds.

Key implications and recommendations for domestic birds

- Domestic birds should be carried upright by holding the wings against the body, and not inverted or by their neck or wings.
- Birds should not be swung, thrown, or dropped during the process of catching and crating.
- Birds should be given sufficient space allowance to sit all at the same time without overlapping and to be able to change/adjust position.
- The height of the container should be such that the comb or head does not touch the ceiling when birds sit with their head and neck in a natural posture or when they change position.
- The height of the container should be such that the comb or head does not touch the ceiling when birds sit with their head and neck in a natural posture or when they change position.
- The most efficient measure for preventing heat stress is to transport animals in vehicles using effective mechanical ventilation or air conditioning.
- Domestic birds should travel in the safe zone (AET below 40).
- If birds travel in the alert zone (AET > 65), journey duration is to be kept to a maximum of 4 hours.
- To prevent prolonged hunger during transport, the total time of feed deprivation should not exceed 6 hours.
- To mitigate against prolonged hunger during transport, the total time of feed deprivation should not exceed 12 hours.
- Feed withdrawal on farm should be avoided as there is no scientific evidence of a welfare benefit of fasting domestic birds before transport.
- Transport duration should be considered as the whole time the animals are kept in the containers.

- The time periods that should be considered for the definition of maximum duration time transport are:
  - The time of feed withdrawal that has been applied on farm to prepare the transport.
  - The time needed to crate all animals for the transport.
  - The time the animals are in the containers/crates (before, during and after the journey itself).
  - The time needed to uncrate the animals (from the first one to the last one).
- The maximum transport duration should be 12 hours, including the time on farm feed withdrawal.