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## Welfare of laying hens

### Disclaimer

- This plain language summary (PLS) is a simplified communication of EFSA's *Opinion on the welfare of laying hens*.
- 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](#).

### Background: laying hen welfare

- In line with its Farm to Fork Strategy, the European Commission (EC) is reviewing animal welfare legislation, including Council Directive 1999/74/EC which provides minimum standards for the protection of laying hens.
- In addition, a 2018 European Citizen Initiative (ECI) – the so-called “End the cage age” – called for banning the use of individual stalls and cages for laying hens amongst other farmed animal species.
- EFSA provided opinions on the welfare of laying hens previously in [2005](#) and [2015](#).
- EFSA's Scientific Panel on Animal Health and Welfare (AHAW) carried out this assessment.

### What was EFSA asked to do?

- Provide a scientific basis for revised measures on the welfare of laying hens, pullets and layer breeders on farm.
- Describe the most relevant husbandry systems used in Europe.
- Identify the relevant welfare consequences for each system along with related [animal-based measures](#) (ABMs) and hazards that can have welfare implications.
- Recommend measures to prevent or correct the hazards and/or mitigate the welfare consequences.
- Compare the risks associated with the use of cages and cage-free systems, including the rearing of laying hens without beak trimming
- Recommend ABMs that can be collected in the slaughterhouse to monitor laying hen welfare on farm.

### How did EFSA carry out this work?

- The AHAW Panel followed EFSA's *Methodological guidance for the development of animal welfare mandates associated with the Farm to Fork Strategy*.
- The Panel reviewed both peer-reviewed and [grey](#) literature as well as information provided by the European Forum of Farm Animal Breeders (EFFAB) and EFSA scientific networks.
- Expert knowledge elicitation (a structured way to obtain information from individuals with specialised expertise in a particular field) and uncertainty analysis were conducted following the EFSA guidance. An innovative behavioural model was used to estimate the space needed to express behavioural needs.
- The data used covered the period between 2004 and November 2022.

### What were the limitations of the currently available data?

- Limited data were available on pullets and layer breeders.
- Uncertainties were also noted regarding the relationships between group size, stocking density and group stress.

### What are the main outcomes?

- Eleven highly relevant welfare consequences were identified:
  - Bone lesions (including fractures and dislocations)



- Group stress
- Inability to avoid unwanted sexual behaviour
- Inability to perform exploratory or foraging behaviour
- Inability to perform comfort behaviour
- Isolation stress
- Predation stress (fear of attack by a predator)
- Restriction of movement
- Resting problems
- Skin disorders
- Soft tissue lesions and damage to feathers, claws and beak
- The most relevant ABMs for collection at slaughterhouses to monitor the on-farm welfare of laying hens are total on-farm mortality, plumage damage, wounds, keel (breast) bone fractures and carcass condemnations (rejection of the carcass).

## Key implications and recommendations

- Birds should be housed in cage-free systems.
- Protocols to measure welfare traits need to be defined (e.g. keel bone fractures and plumage condition) for all commercial hybrids to encourage further progress in genetic selection and to enable producers to choose strains with a reduced risk of bone and soft tissue lesions and skin damage.
- Always provide friable (dry, sand-like) litter, supplemented by the provision of new litter material and other enrichments that support comfort and exploratory behaviour.
- Implement all preventive measures against injurious pecking to phase out beak trimming.
- House flocks with easily accessible, elevated platforms and/or perches to allow simultaneous resting for all birds, and to enable birds to avoid each other.
- Provide a covered veranda to reduce stocking density during the daytime when they birds most active and allow birds to choose between temperatures, light conditions and substrate quality.
- In climates where a covered veranda cannot be provided, provide additional space.
- Implement harmonised assessment methods and scoring systems on farm for monitoring mortality and wounds, plumage damage, keel bone fractures and carcass rejection at slaughter. Such tools can be used to monitor welfare level across farms in Europe.
- Rear pullets with dark brooders (which mimic some aspects of a mother hen by providing a warm and dark resting area) to reduce fearfulness during rearing and the subsequent laying period. Rear them in a system that supports the development of navigation skills.
- In layer breeders, reduce male aggression to females e.g. by reducing the proportion of males included in flocks (below 1:10); select male birds for reduced aggression; include a partition panel to allow females to escape from males; and enable birds of similar age to interact.

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