



Welfare insights on slaughter of pregnant animals

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EFSA's Panel on Animal Health and Welfare has examined issues surrounding the slaughter of pregnant farmed animals in the European Union. Their scientific opinion – which covers dairy cows, beef cattle, pigs, horses, sheep and goats – gives new insights on how many pregnant animals are slaughtered in the EU, the reasons why they are slaughtered and whether livestock fetuses can experience pain, distress or discomfort.

Experts propose practical measures for reducing the number of pregnant animals slaughtered.

This scientific opinion, which follows a request from Denmark, Germany, the Netherlands and Sweden, strengthens knowledge on these issues. Ultimately, it will contribute to the improvement of animal welfare in Europe.

Methodology used

Methods used to gather information for the assessment include:

- A review of the limited literature available.
- A survey of 100 slaughterhouse operators across 10 Member States to estimate the proportion of pregnant animals slaughtered and at what stage of their gestation.
- A scientific method known as Expert Knowledge Elicitation (EKE) to share the results of the survey and estimate the prevalence of pregnant animals slaughtered across the EU and a second EKE to assess the evidence on whether fetuses experience pain, distress or discomfort. This involved experts from the relevant fields: physiology, embryology, human medicine and life science.
- Finally, members of the EFSA Panel on Animal Health and Welfare developed overall conclusions, based on the outcomes of the EKEs.



What is Expert Knowledge Elicitation (EKE)?

- EKE is a systematic, documented and reviewable process for collecting judgments from experts.
- At EFSA, EKE is used when there is limited empirical evidence for an assessment.
- Different methods exist to elicit impartial knowledge from experts. These include detailed protocols for obtaining expert judgment in the areas covered by EFSA's food safety remit and training of our scientists and external experts to ensure a consistent approach to EKE.

Why are pregnant animals sent for slaughter?

Farmers may not be aware that animals sent for slaughter are pregnant due to:

- Lack of supervised breeding (especially in outdoor farming systems).
- Absence or failure of pregnancy testing by farmers.
- Poor recording or loss of information in the trading chain.

If they are aware, their decisions may be linked to:

- Animal health and welfare considerations – e.g. a pregnant animal is sick or affected by a disease which could spread to other animals.
- Management advantages – e.g. pregnant animals tend to be generally calmer than non-pregnant animals.
- Economic necessity, e.g. sale of animals due to economic reasons.



Can livestock fetuses experience pain, distress or discomfort?

Experts agreed that in the first two thirds of gestation, animal fetuses do not experience pain, distress or discomfort because the relevant anatomical and neurological structures develop only during the last third of gestation.

The estimated probability that animal fetuses experience pain during the last third of gestation is described in the two scenarios below:

- The most probable scenario (with 66-99% likelihood) is that animals do not experience pain during the last third of gestation. This is mainly due to factors such as mechanisms in the brain that inhibit the ability to experience pain, low levels of oxygen in the system of the fetus and that fetuses are in a sleep state for much of the time during gestation.
- The least probable scenario (1-33% likelihood) is that animals do experience pain. This is based on a possible interpretation of the electrical activity detected in the brains of fetuses and their ability to respond to external stimuli.

What is likelihood, or probability?

Probability is the likelihood that a particular event will occur or that a measured value will fall within a particular range. EFSA's Scientific Committee has provisionally endorsed a scale for quantifying the probability of uncertain outcomes. If assessors consider a conclusion is very likely (90-99% probable), decision-makers and the public can have a high degree of confidence in measures that are in line with that conclusion. If the outcome is "as likely as not" (33-66% probable), the decision-maker may be less persuaded depending on the greater weight of other non-scientific factors (e.g. social or economic) and may be more inclined to take precautionary measures unless there is scope to reduce the uncertainty (e.g. through new research). If assessors consider a conclusion is very unlikely (1-10% probable), decision-makers may give it little weight when choosing how to proceed.



How many pregnant animals are slaughtered in Europe in the last third of gestation?

According to EFSA expert judgement, on average 3% of dairy cows, 1.5 % of beef cattle, 0.5% of pigs, 0.8% sheep and 0.2% of goats in the EU are slaughtered during the last third of gestation. Experts could not estimate figures for horses due to lack of information.

Measures for reducing the slaughter of pregnant animals

EFSA experts set out practical measures to reduce the number of pregnant animals slaughtered.

- Implement measures to improve the health of animals on farm and therefore reduce unplanned slaughter for such reasons as animal sickness.
- Implement management practices such as single sex housing and supervised breeding.
- Establish the gestation status of all animals to ensure that they are not sent for slaughter during the last third of gestation.
- Ensure information about gestation diagnosis is present in documentation accompanying animals at the time of sale to farmers.
- Implement education and communication strategies for farmers on preventive measures.
- Undertake research to improve the accuracy of rapid on-site gestation testing, especially for the diagnosis of later stages of gestation in small ruminants and pigs.