

Question to EURCAW-Pigs: Respiratory distress on arrival at the slaughterhouse

23 June 2023

Question

Received: 2 February 2023

EURCAW-Pigs received the following questions from a welfare policy worker in one of the Member States:

- *What are the most appropriate measures to be taken for pigs with signs of respiratory distress on arrival at the slaughterhouse in order to eliminate suffering?*
 - *Slaughter as soon as possible?*
 - *Rest and shower?*
 - *Do these measures depend on the severity of respiratory distress?*

Experts from EURCAW-Pigs wrote the reply. The EURCAW secretariat did the final editing. For queries: info.pigs@eurcaw.eu.

Answers

In short, the answer is:

- In case of heat stress in any pig at arrival the identified animal should be removed from the area, moved to a place with shade and ventilation and provided with water. Animals can be cooled down using water sprinklers, showers, or equivalent, if the ventilation permits exchange of humidity. In case immediate unloading is not possible at arrival trucks should be placed in a shaded area with enough ventilation to mitigate the welfare consequences.

Background

Fox et al. (2014) studied the effect of sprinkling pigs in trailers on behaviour and body temperature during transport and lairage. When ambient temperature was above 23°C, it was shown that water sprinkling of pigs for 5 min in the truck before leaving the farm and during waiting time in the lorry at arrival in the slaughterhouse reduced heat stress as demonstrated by a reduction of drinking behaviour in lairage and physical fatigue at slaughter (lower blood lactate levels).

Pereira et al. (2018) studied the effect of a trailer fan-misting bank in a slaughterhouse in Brazil. They found that the efficiency of the fan-misting bank varied by compartment location in the lorries, but concluded that this cooling system appeared to be effective in improving the thermal comfort of the pigs. However, water sprinkling combined with insufficient ventilation can also result in increased difference in humidity levels (up to + 7.5%) between the trailer interior and the external environment (Fox et al., 2014), preventing efficient evaporative cooling in pigs.

A crucial preventive measure to consider for (planning) transport is to avoid transport during the hottest hours of the day in order to avoid extreme temperature, especially when trucks are not equipped with forced ventilation systems. To prevent and correct high effective temperatures experienced by the pigs in hot climatic conditions, pigs should also be protected from direct exposure to the sunlight and unloaded immediately from the truck. At arrival, it is suggested to

provide shelter and adequate ventilation in order to get close to the recommended conditions of 15–28°C and 59–65% humidity (EFSA AHAW, 2020).

Conclusion/recommendation: In case of heat stress in any pig at arrival the identified animal should be removed from the area, moved to a place with shade and ventilation (fan) and provided with water. Animals can be cooled down using water sprinklers, showers, or equivalent, if the ventilation permits exchange of humidity. (EFSA AHAW, 2022)

In case immediate unloading is not possible at arrival trucks should be placed in a shaded area with enough ventilation to mitigate the welfare consequences.

Relevant references

EFSA AHAW, 2020. *Welfare of pigs at slaughter*. <https://doi.org/10.2903/j.efsa.2020.6148>

EFSA AHAW, 2022. *Welfare of pigs during transport*. <https://doi.org/10.2903/j.efsa.2022.7445>

Fox, J., Widowski, T., Torrey, S., Nannoni, E., Bergeron, R., Gonyou, H.W., Brown, J.A., Crowe, T., Mainau, E. & Faucitano, L., 2014. Water sprinkling market pigs in a stationary trailer. 1. Effects on pig behaviour, gastrointestinal tract temperature and trailer micro-climate. *Livestock Science*, 160, 113–123.

Pereira, T.L., Titto, E.A.L., Conte, S., Devillers, N., Somavilla, R., Diesel, T., Dalla Costa, F.A., Guay, F., Friendship, R., Crowe, T. & Faucitano, L., 2018. Application of a ventilation fan-misting bank on pigs kept in a stationary trailer before unloading: effects on trailer microclimate, and pig behaviour and physiological response. *Livestock Science*, 216, 67–74.

<https://doi.org/10.1016/j.livsci.2018.07.013>