



## **WHAT DO THE HEAT STRESS RISK ASSESSMENT REVIEW RECOMMENDATION MEANS?**

In the past, measures which use mortality as bench mark used to evaluate animal welfare in live sheep exports from Australia to the Middle East, but it is time to consider the actual welfare criteria to evaluate the welfare status in animals. Animals exported from Australia to the Middle East experience many welfare challenges as this is a long journey, even though they might survive. Therefore, mortality is not a good indicator for evaluating the animal's welfare and should be replaced with a raft of welfare measures.

Exporters should comply with any legislative requirements and any other conditions of their approved arrangements. A meaningful heat stress management plan could be a part of an exporter's approved arrangement.

There are factors which affect heat stress such air turnover, ventilation design, stock density and handling methods which consequently affect animal's welfare.

One of the reasons for heat stress in this journey is high stock density. Sheep cannot, even in good conditions, get to their food and water without having to climb over other sheep. The risk of heat stress causing suffering and death can be reduced to some extent by reducing the stocking density of the sheep on a voyage. This enhances airflow around the animals and reduces the build-up of humidity and ammonia from the accumulating manure. The actual space available to each sheep would vary with the weight of the sheep and the ventilation design of the ship. The space allocation also should be reviewed by expert committee. Having much lower stocking densities all the time could eliminate almost all risks of heat stress, and avoiding shipments of livestock entirely during northern summer could be considered as another resolution of this issue. Moreover, allocation of animals to different pens should be based on their weight and their size. For example, lambs and adult sheep should not be kept at one pen.

Ventilation design, pen's air turnover and air conditioning are critical factors which can reduce heat stress significantly. The efficiency of these systems should be independently audited before travelling to the Middle East.

Yours sincerely

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