

CRITICAL POINTS IN THE TRANSPORT OF LAMBS TO SLAUGHTER IN SPAIN THAT MAY COMPROMISE THE ANIMALS' WELFARE

J. Escos, G.A. María, J. López, S. Alierta, S. García-Belenguer and G. Liste*

Departamento de Producción Animal y Ciencia de Alimentos. ¹ Departamento de Patología Animal. Facultad de Veterinaria, Universidad de Zaragoza. Miguel Servet 177, 50013. Zaragoza, Spain. Email: mgliste@unizar.es

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Introduction

The meat production chain ends with the transport and slaughter of the animals in the slaughterhouse. This very important stage of the system can put at risk all of the work carried out for months by the cattle dealers. It is advisable that the sector pays attention to ending this process well, offering a good image to the consumer and assuring benefits to the sector. There is little information available on transport problems in the countries of the Mediterranean area. Project OVITRANS analyses the effect of transport and a delay to the slaughter, on the well-being of the animals and the quality of the meat. In the present communication we present the results of module 1 of the project the objective of which is to describe the transport situation of ovines in relation to prior handling up to transport, the transport itself, the delay in the slaughterhouse and the slaughter, with the purpose of identifying the strategically important points of the transport process that could affect the well-being of the animal and the quality of the meat.

Materials and Methods

The procedures for loading, transporting and unloading lambs, and slaughterhouse practices in Spain were surveyed from November to March 2006, and involved 60 farms, 30 truck drivers, 20 slaughterhouses and 11 centres of classification that receive lambs from more than 1000 livestock farms. Questionnaires were completed either face-to-face, by telephone or by mail. The original questionnaire is available at <http://wzar.unizar.es/catra>. The same questionnaire was used for each interviewee and farmers were asked to provide specific information about their loading and handling facilities, in addition to the farm's general housing and husbandry practices.

Data management was performed with ACCESS and descriptive statistics were calculated for each of the relevant questions. All the averages presented are mean \pm standard deviation (number of data).

Results and Discussion

Farms

We analysed surveys from 60 farms growing Rasa Aragonesa. Before the animals are transported they are separated in 32 out of 39 cases (82.05%) for 52.82 ± 79.64 (34) hours. The animals are led in groups (88.89%). Preloading pens are present in only 14 out of 37 cases (37.84%). Feedlots are mixed 13 out of 36 times (36.11%). The animals are driven using humane aids together with ramps and hydraulic elevators. Loading angles range from 15° to 20°. Climatic and environmental control is not present (94.74%). Veterinary control is generally not required (97.44%). Average unloading time is 16.36 ± 7.84 (39) minutes.

The travelling distance from the farms to the slaughterhouse ranges from 190 to 2 km distance.

Before transportation, the animals are separated from their original pen for an average of 21.86 ± 33.67 (7) hours before they were transported in 90.91% of the cases. The animals are normally fed before transportation. The loading is performed by both transporters and farmers. Only in 27.27 % of the cases the farmer is the legally responsible person present, while in most cases (72.73%), it is both farmer and transporters. Seven out of nine (77.78%) of the feedlots had preloading pens.

Unloading at the farm was typically short and similar to the loading. No use of sticks or electric elements was recorded in any case. Normally, both the driver and farmer employees unloaded the truck, but the driver unloaded by himself at 18.18% of the feedlots, and the remainder were unloaded by both. The legal person responsible for unloading is eight out of eleven, and only 2 out of eleven cases it was the transporters. The animals were unloaded in groups.

The average number of loading animals was 319 with 55 animals per compartment and an average density of $0.36 \text{ m}^2 \text{ sheep}^{-1}$.

Transport

Transport of livestock in Spain is performed by drivers with averaged experience of 20.71 ± 10.60 (14) years. Of this group, 65.38% are the owners and 19.23 % are employees. From twenty seven surveys analysed, the drivers had special permission in 81.48% of the cases, 33.33 % passed special examinations and 48.15 % received training.

Most of the drivers interviewed owned small lorries with two to three axles (64.52%). Most of the trucks are rigid (58.06%), 25.81% are trailers, and only 16.13% are trucks with trailers. Most of them had pneumatic suspension (70.97%). Truck transports a single species per trip (93.55%), but they can transport different species in different trips (63.33%).

The truck box is always separated from the truck (100%) and may be open (36%) or closed (48%). The average height of the box-tack is 3.48 ± 0.66 (22) meter. Box aeration can be either natural (65.38%), acclimatised (7.69 %), forced (11.54 %). They present drinking facilities in 46.15% of the cases. Average driving time is 7.82 ± 2.67 (20) hours. The number of compartments per levels varies between 2 (13.79%) to 12 (6.90%) evenly distributed among those values.

Slaughter

The mean number of animals slaughtered each day at each slaughterhouse was 659.74 ± 909.49 (20); 3032.37 ± 4544.92 (19) per week. Most of the lambs are slaughtered are Lechal and Ternasco. Slaughters are performed evenly in spring-summer (30.43%) and in autumn-winter (43.48%). During unloading in the slaughterhouse the animals were kept in groups (77.27%) unmixed (91.93%).

Most of the slaughterhouses had a waiting place after unloading (94.74%), covered with a roof (95.65%) and climatic control (55%). The average density of lambs per square meter was 2.57 ± 0.53 (7). The animals waiting before unloading varied between 19.13 ± 18.96 (15) and 4.42 ± 8.64 (12) minutes. Average time of unloading oscillated between 22 ± 18.69 (15) and 5 ± 4.71 (14) minutes.