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The effects of driving events on the stability and resting behaviour of cattle, young calves and pigs

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Abstract

*The welfare of animals in transit may be affected by driving events, such as acceleration, braking and cornering. The relationships between driving events and the behavioural responses of the animals were examined. A single-deck, non-articulated vehicle was fitted with a video-recording system, GPS and tri-axial accelerometer. Two drivers each drove three standard journeys (two 3-h stages on different types of roads) for each animal type. Six different groups of five cattle (*Bos taurus*), ten calves and ten pigs (*Sus scrofa*) were each transported on separate journeys. Cattle stood still for most of each journey. Calves spent more time lying down during the second stage of the journey than during the first. Although pigs spent some of the time lying down, they spent more time sitting down and this time was greatest on a motorway and during the second stage of the journey. Frequent adjustments to maintain stability were required in response to acceleration, braking, cornering and rough road surfaces. Some animals experienced repeated falls. Falls occurred after a series of different types of events. The fewest losses of balance occurred on the motorway. As a motorway is a limited access multi-lane carriageway not crossed on the same level by other traffic lanes, the driver does not normally undertake frequent vehicular adjustments to respond to road features. Therefore, motorways give animals an opportunity to rest and avoid discomfort from repetitive driving events. If drivers anticipate potential driving events and prepare for them, it will reduce the likelihood and severity of losses of stability.*

Keywords: *animal welfare, behaviour, calves, cattle, pigs, transport*