Transport of horses for slaughter in Iceland

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Abstract

There is interest in the transportation of horses (Equus caballus) to slaughter and a need to assess the welfare implications of this practice. Forty-six loads of 7–35 horses transported for 0.33 to 3.10 h to a slaughter plant in Iceland were studied. Adults and foals were transported together and then placed in separate pens overnight in the lairage. This acted as a weaning procedure for the foals. Between one and eleven horses per load (59 adults and 129 foals) were observed during loading and at the slaughter plant, blood was sampled at slaughter and carcases were observed. No wounds were observed before transport, but 1.6% of horses had small, superficial bleeding wounds after transport. The respiration rate was greater after, compared to before, transport. Blood lactate concentration measured after lairage and slaughter was greater than normal in both adults and foals, 13% of adults and 20% of foals had a blood glucose concentration lower than normal, and 58% of adults and 25% of foals had a plasma total protein concentration greater than normal. Forty-four percent of adults and 17% of foals were bruised. There were no pre-existing conditions affecting the fitness of the horses for transportation. The effects of transport on the physiological responses and the severity of bruising were relatively minor. However, the results suggested that the handling, transport and lairage of the horses resulted in injury and signs of exertion or stress that were not compatible with optimal management practices. The mild dehydration in adults might have been associated with restricted access to drinking water during lairage of lactating mares. Controlled studies are required to identify the specific practices used in Iceland that result in injury and dehydration.

Keywords: animal welfare, dehydration, horses, injury, lairage, transport

Introduction

There is considerable interest in the transportation of horses (Equus caballus) to slaughter and a need for studies to assess the welfare implications of this practice. The transportation of horses for slaughter differs from transportation of horses for sport or recreation where they are often kept in single stalls with body protection (Weeks et al. 2012). Horses transported for slaughter have lower economic value, are transported loose in groups, with no body protection, but some padding of the internal surfaces can sometimes be provided in the vehicle. Although potential welfare issues have been identified in North America and the European Union (EU), there have been no studies on the equine slaughter industry in Iceland. In 2010, the horse population in Iceland was 77,000 and 6,679 horses were slaughtered for meat (Food and Agriculture Organization of the United Nations 2014). In the autumn, foals and breeding mares that have been reared together on grazing land are rounded up and placed in corrals on the farm and those not required for breeding are sent for slaughter. Although Iceland is within the top 50 countries in the world in terms of numbers of horses slaughtered per year, Icelandic production only represents about 0.1% of the horses slaughtered per year. In 2010, Iceland exported 216 tonnes of horse meat to The Russian Federation (53%), Switzerland (22%), Denmark (12%), Vietnam (11%) and China (2%) (Food and Agriculture Organization of the United Nations 2014).