

Short title: Injuries and illness related to transportation

Risk factors in equine transport-related health problems: A survey of the Australian equine industry

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<http://onlinelibrary.wiley.com/doi/10.1111/evj.12631/full>

This cross-sectional online survey study aimed to provide information on the risk factors for illness and injury associated with equine transportation. Of the 797 responses to the survey from both amateur and professional equestrians in Australia, all of whom transported horses at least monthly, there were 214 cases of a transport-related health problem over the previous 2 years. There was a significant association between journey time and vehicle, and transport by a commercial company. Trailers and non-commercial transporters were more commonly used for shorter journeys.

Ten horses died during transit (two were found dead and the remaining eight were euthanased due to fractures). An additional 15 horses were euthanased within 1 week of the journey, seven of which occurred within 24 hours. Journey duration and breed were associated with transport-related health problems. Compared to Standardbreds, Thoroughbreds, Arab and Warmblood horses were more likely to develop illness than be injured during transportation.

Compared to injuries, illness including gastrointestinal and respiratory problems, as well as death and euthanasia, were significantly associated with longer journey time. Respiratory disease was the most common problem and the risk increased with longer journey time. Muscular problems were more likely on an intermediate length journey than a short one. There was no influence of journey duration on the incidence of heat stroke. Injuries were more likely to occur on shorter journeys. This is likely to be associated with behavioural problems or movement within the vehicle during the early part of the journey.

Bottom line: Transport-related health problems are significantly associated with longer journey time, with illness more likely on journeys over 24 hours duration. Injuries more commonly occur on short journeys.