# Risk Factors for Racehorse Fatalities in Jump Races in Victoria, Australia

Boden, Lisa[1], Anderson, Garry[1], Charles, Jenny[1], Morgan, Kenton[2], Morton, John[3], Parkin, Tim[4], Slocombe, Ronald[1], Clark, Andrew[1]
[1]Department of Veterinary Science, The University of Melbourne, 250 Princes Highway, Werribee, Victoria, Australia
[2]Department of Veterinary Clinical Science, University of Liverpool Veterinary Teaching Hospital, Leahurst, Neston, United Kingdom
[3] School of Veterinary Science, University of Queensland, St. Lucia, Queensland, Australia
[4]Animal Health Trust, Lanwades Park, Kentford, Newmarket, Suffolk, United Kingdom

A retrospective case-control study was conducted to investigate racehorse fatalities in starts in jump (hurdle and steeplechase) races in Victoria, Australia, between August 1989 and July 2004. During the fifteen-year period, 195 starts in jump races ended in fatality. A total of 2477 control starts (i.e. starts in Victoria over the same time period not ending in fatality) were selected randomly from a commercial database.

Univariate and multivariable logistic regression were used to identify risk factors for fatality. Preliminary results from multivariable models indicate that the odds of fatality were greater for starts in steeplechase events compared to hurdle events, on city tracks compared to country tracks and with increasing age. The odds decreased with greater numbers of flat, hurdle and steeple starts in the 60 days preceding the start. The numbers of both career flat and jump starts prior to the study start were also associated with an increased odds of fatality. Although not significant in the final model, the length of the finishing straight and the country of origin were considered to be variables of interest associated with fatality. The odds of fatality decreased with longer finishing straights and with locally bred horses compared to foreign-born horses.

This is the first study to investigate specific risk factors for fatality in hurdle and steeplechase races in Victoria. These results will form the basis for recommendations to reduce the risk of fatality in jump races in the future.