



Injury Statistics

Safework Australia recently published a *Guide to managing risks when new and inexperienced persons interact with horses* (June 2014). This guide included the following information about horse related injury in Australia.

The Australian Institute of Health and Welfare (AIHW) maintains a database on patients admitted to hospital. Between 1 July 2008 and 30 June 2011 a total of 11,635 hospital admissions were recorded for horse-related incidents, with 11.5% (n=1335) being work related injuries. An average of 1.2 workers are hospitalised each day in Australia due to a horse related injury.

76% of the patients suffered the injury whilst riding.

For females, the admissions showed a concentration between the ages 10 and 24. For males, the admissions were more evenly distributed between the ages 15 and 64. There were fewer hospital admissions of people in the older age groups.

Research from the National Coronial Information System (NCIS) indicates between July 2000 to June 2012, 98 horse-related deaths occurred. This is an average rate of 8 deaths per year.

Data from the NCIS also shows that:

- **73 fatalities (74%) were a result of a fall from the horse (6 per year).**
- six deaths (6%) involved children under the age of 10. Young people between 10 and 19 accounted for another 14 deaths (14%)

The National Dataset for Compensation Based Statistics shows over 11 years to 2010/11, 4305 serious injury claims were horse related.

Injury Mechanisms

In a study conducted by Rural Industry Research and Development Corporation, to investigate the effectiveness of existing safety vests for jockeys and trackwork riders in Australia, video footage of 17 jockey race falls were investigated. There were 39 individual injuries recorded which included 7 head injuries (2 of which were fatal), 5 facial injuries, 6 injuries to the neck and 8 to the back or spine, 2 to the shoulder or clavicle, 3 chest injuries, 2 injuries to the upper limbs and 6 to the hip and lower limbs.

There were three main injury-producing fall modes observed, being 1) Forward dive into the track as the horse stumbles; 2) Fall off the side of the horse whilst holding onto the reins; and 3) Rider butted into the air or thrown from the horse. There were observed to be very few active attempts at injury minimisation by riders, for example, taking a tucked position.

In a tucked position the head and arms are “tucked” or pulled closely to the body and the spine flexed. The intent is to minimise flail of the limbs and to reduce the exposure of the neck when the jockey tumbles as a result of the fall. The riders tend to hold onto the reins for as long as is possible and hence were poorly prepared for the eventual landing. When they tumbled, it was often uncontrolled with arms and legs flailing.

[Foote, C.E., Gibson, T.J. and McGauran, P.J. Evaluation of safety vests - Health and safety in Australian racing. Rural Industries Research and Development Corporation. Publication No. 14/037, 2014]