

FALL AND INJURY INCIDENCE RATES OF JOCKEYS WHILE RACING IN FRANCE, GREAT BRITAIN AND IRELAND

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INTRODUCTION: The objective of this study is to provide quantitative details of the frequency and severity of injuries, especially head injuries, sustained by jockeys while racing. There is a lack of worldwide equestrian injury data and a lack of uniformity in the data that is available.

METHODS: All available epidemiological injury data were collected and provided to the authors for the racing seasons of 1999-2006 by the senior Medical Officers of both the Irish Turf Club and France Galop. Corresponding data have also been collated and published previously by the medical personnel of the British Horseracing Authority (Balendra et al. 2007, McCrory et al. 2006). Incidence rates and proportions were compared between racing types and racing jurisdictions using Incidence Rate Ratios, Poisson Regression and two-proportion t-tests.

RESULTS: Of all jockeys, it is amateur jump racing jockeys that fall most frequently in Ireland, France and Britain. Jump racing also has the highest rates of injury/ride amongst both amateur and professional jockeys. Flat racing, however, has the highest rates of injuries/fall (34-44%). While there is a paucity of worldwide equestrian injury data and a lack of uniformity in the data that are available, it would appear that 15% of all injuries in both jump and flat racing populations of amateur and professional jockeys are concussive and more than half of these involve loss of consciousness (LOC).

DISCUSSION: Differences in fall rates between amateur jump jockeys from different countries could be due to different racing environments, such as the presence of jumps, field conditions and racing speed. Why there are relatively high incidences of concussion in equestrian racing is not clearly known. The prevalence of mildly concussive injuries to professional jockeys and the high chances of LOC in the event of a concussion suggest that the performance of current helmet designs (BSI 1997) would merit future investigation.

CONCLUSION: This study will help to motivate future efforts into designs for personal protective equipment including helmets, reconstructions of documented falls involving injury, and identifying fundamental differences between horse racing types and jurisdictions.

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