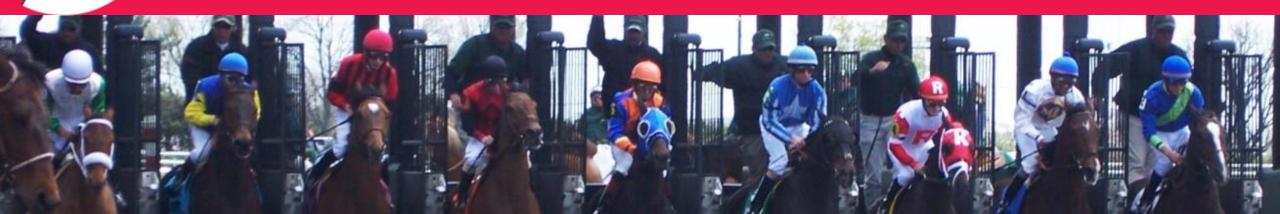


Safety Initiatives and the Jockey





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Mutual benefits: By protecting horses' welfare we can improve jockey safety Dr Peta Lee Hitchens









The problem

- Hazards of horse racing are well known
- Racehorse fatality rates relatively stagnant
- Most common reason for jockey injury or fatality ¹
- Lack of and/or conflicting evidence base



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Background | Jockey fatalities

In Australia since 2014:

- 8 jockey and trackwork rider deaths
- 5 of them related to fatal racehorse injuries



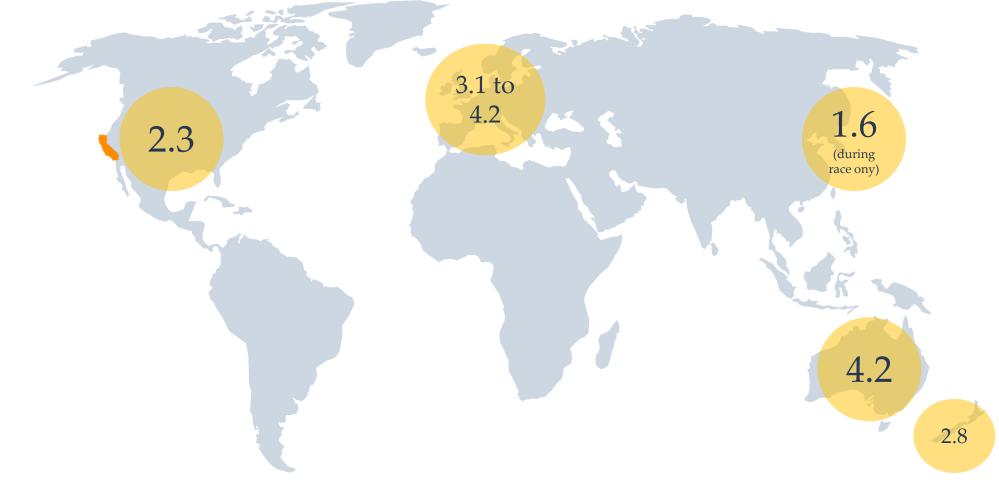
Background | Previous research

Research has determined:

- Incidence of jockey falls and injuries
- Risk factors for jockey falls and injuries (Australia)
- Association between racehorse fatality and jockey injury



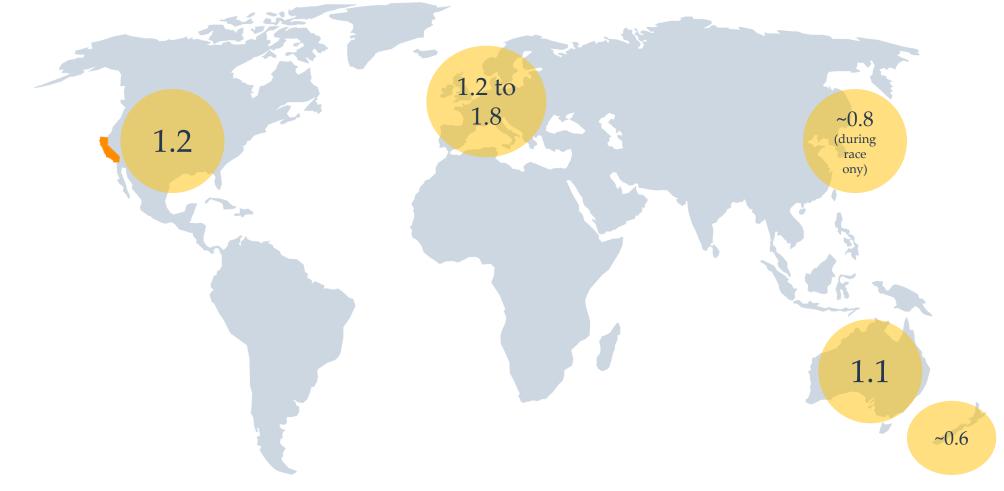
Jockey falls per 1000 flat race rides by country



Oikawa 2004; Turner et al. 2004; McCrory et al 2006; Hitchens et al. 2009, 2013; Bolwell et al. 2014



Jockey injuries per 1000 race rides by country



Oikawa 2004; Turner et al. 2004; McCrory et al 2006; Hitchens et al. 2009, 2013; Bolwell et al. 2014



Risk of jockey falls and injuries

Cumulative risk profile

Apprentice jockey

Inexperienced apprentice jockey (<250 race rides)

Riding a less accomplished (maiden) horse

Riding a less experienced horse (<5 race starts)

In a sprint race

On a dry fast turf track

Hitchens et al. 2010, 2012





When a racehorse comes down so does the jockey, thus we hypothesize that racehorse injuries are associated with jockey injuries **BUT**

We had not yet linked data on racehorse injuries with jockey injuries

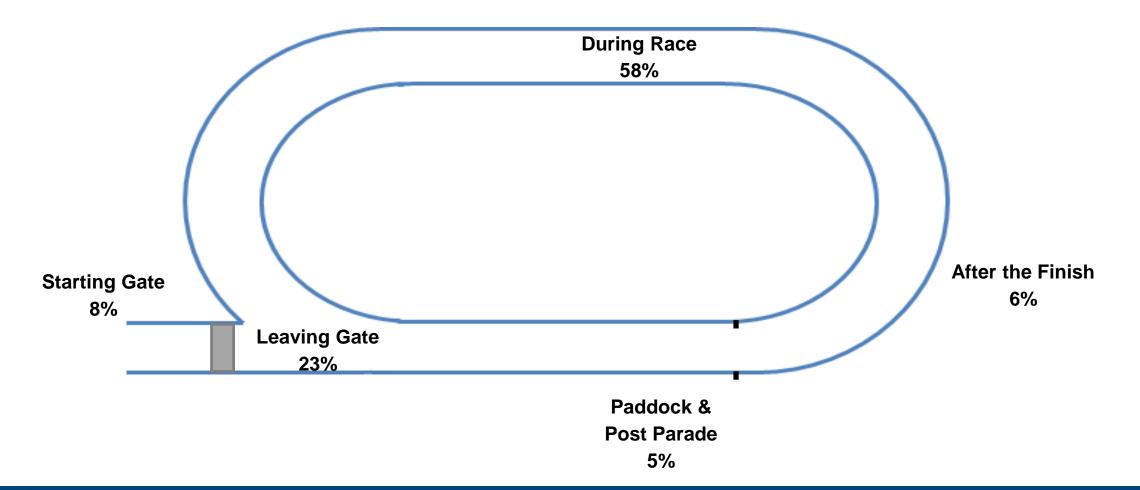


Methods | Data sources

- California Jockey Accident Database, 2007 to 2012
 - 325 injuries and 601 falls from 264,055 race rides
- Falls and injuries identified from jockey accident reports (Stewards)
- Racehorse fatality data from the CHRB Postmortem Examintion
 Program database

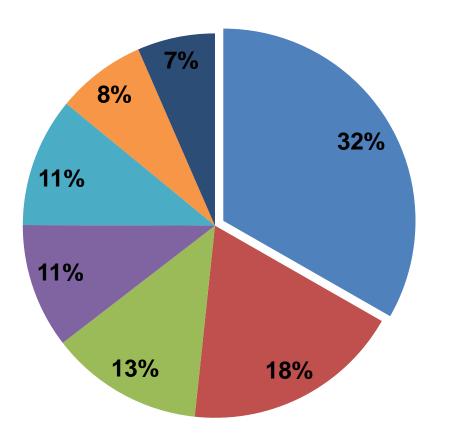


Results | Jockey fall location





Causes of jockey falls | racehorse fatality



Catastrophic injury/death of horse Horse behavior Stumbled Clipped heels Shifted ground abruptly Hampered by fallen horse Other/not specified

Hitchens et al. 2013



Results | Incidence of jockey injuries

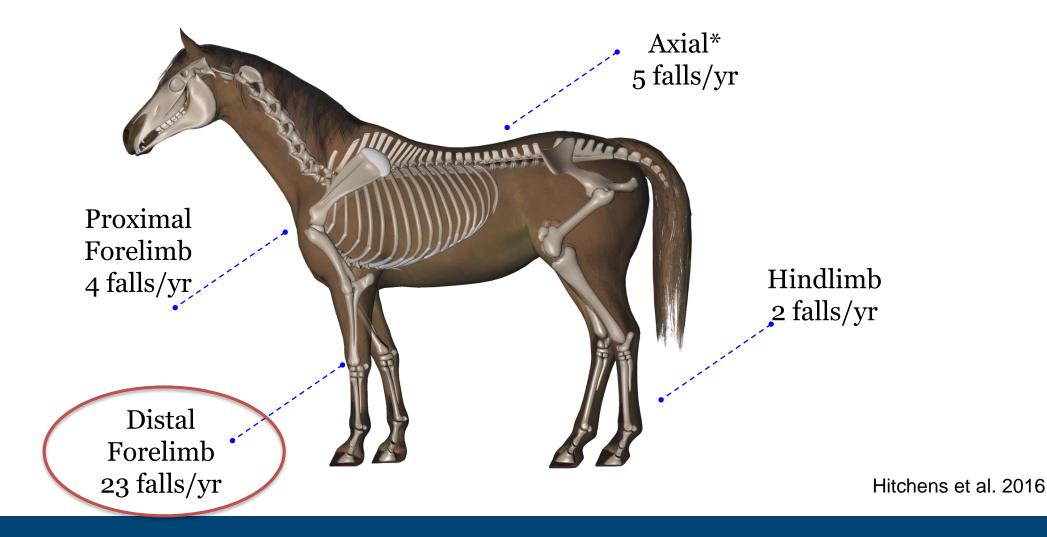
Of the jockey falls that were a direct result of racehorse

fatality, over 60% resulted in injury to the jockey



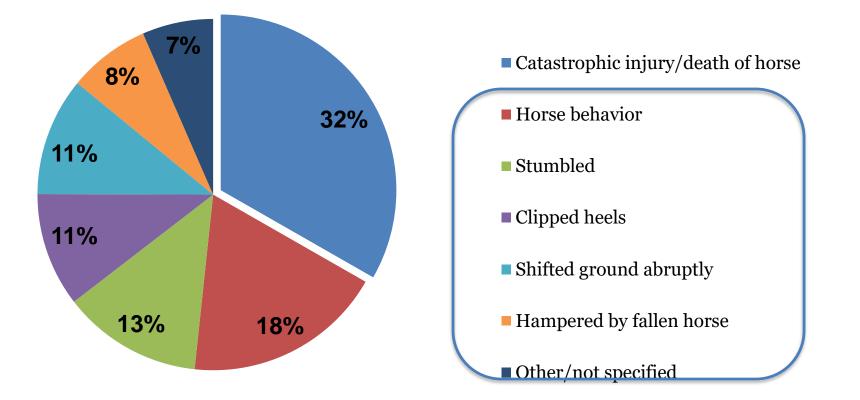


Jockey falls associated with racehorse injury



Note: Figures are for jockey falls in Thoroughbred and Quarter Horse racing in California from 2007 to 2012. * Axial includes pelvis, and cervical, lumbar and sacral spine.

Causes of jockey falls | other





Horse behaviour

- 97% of pre-race falls a result of horse behaviour
- Horse may also become injured if loose
- These types of falls are normally not as serious in nature

Hitchens et al. 2009, 2013, 2016



Results | Jockey injury costs

> USD 1 million/year

USD 19,635/claim

52 claims/year



Data for California, 2007 to 2012 Courtesy: FINISH LINE SELF INSURANCE GROUP



Results | Jockey injury costs

Claims that were a result of a horse that

broke down:

USD 103,439/claim

Data for California, 2007 to 2012 Courtesy: FINISH LINE SELF INSURANCE GROUP





Results | Exercise rider injury costs

USD 3.2 million/year

USD 28,206/claim

112 claims/year

Data for California, 2007 to 2012 Courtesy: FINISH LINE SELF INSURANCE GROUP



Conclusions

- Incidence of injuries is comparable across countries
- A number of readily modifiable risk factors
- High proportion of jockey falls and injuries caused by horse fatality
- Cost of jockey injuries associated with horse breakdown are high
- Tip of the iceberg
 - does not include injuries incurred during trackwork



Interventions

- Ensure horses are thoroughly acclimitized and educated
- Ensure horse and rider combinations are well suited
- Be vigilant when training a horse that is at higher risk than normal for injury
- Prevent the most common racehorse injuries and death, e.g., fetlock injuries
 - Training programs (avoid under or over-training)
 - Medication restrictions
 - Track management
- Standardised record keeping and regular analysis











Racing Victoria





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Equine Limb Injury Prevention Program