



Safety Initiatives and the Jockey





Welfare & Safety of the Racehorse Summit VIII



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THE UNIVERSITY OF
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Mutual benefits: By protecting horses' welfare we can improve jockey safety

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Welfare and Safety of the Racehorse Summit

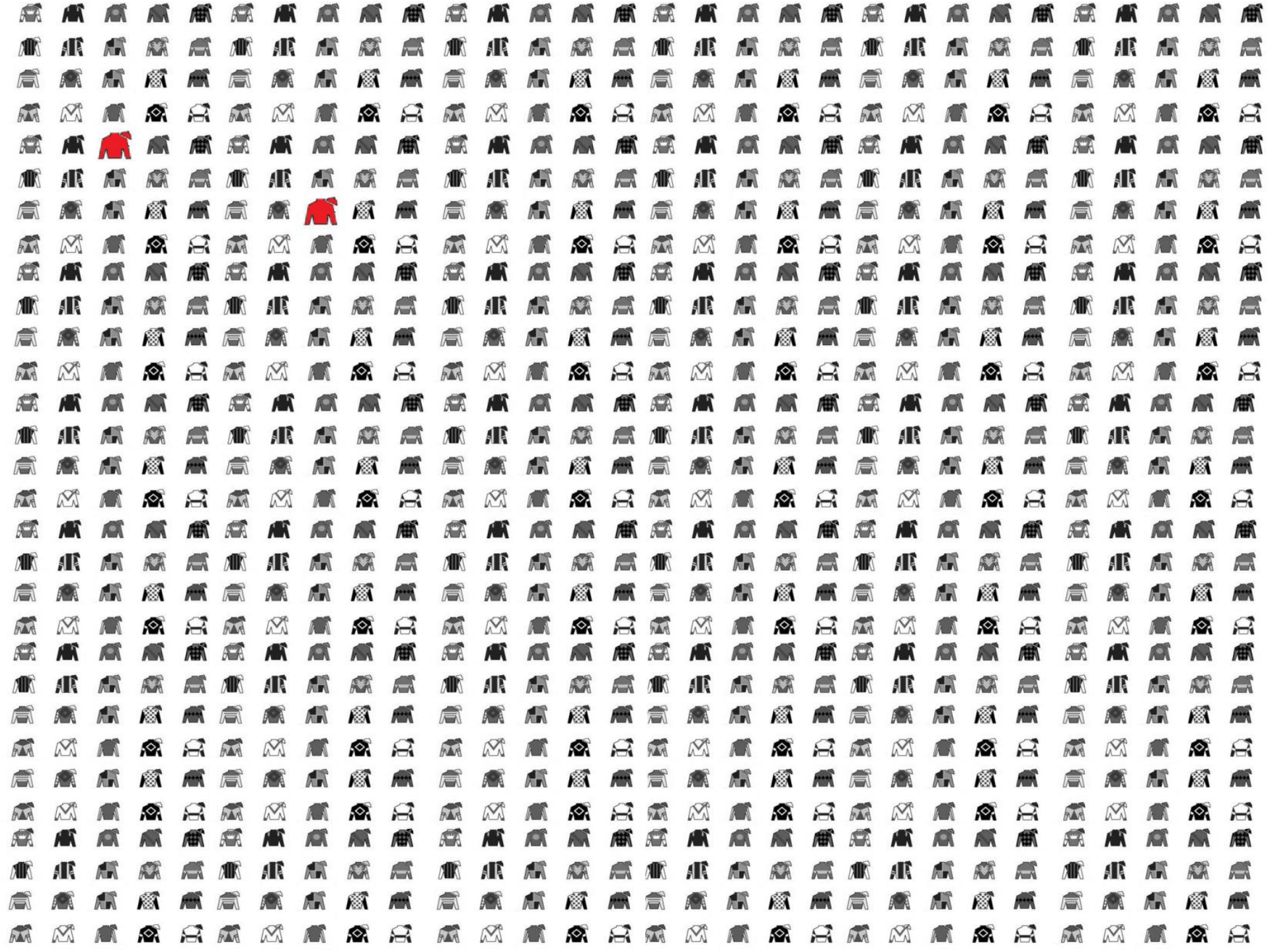


**Racing
Victoria**

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

¹ Hitchens et al. 2013, 2016; Wylie et al. 2017



Background | Jockey fatalities

In Australia since 2014:

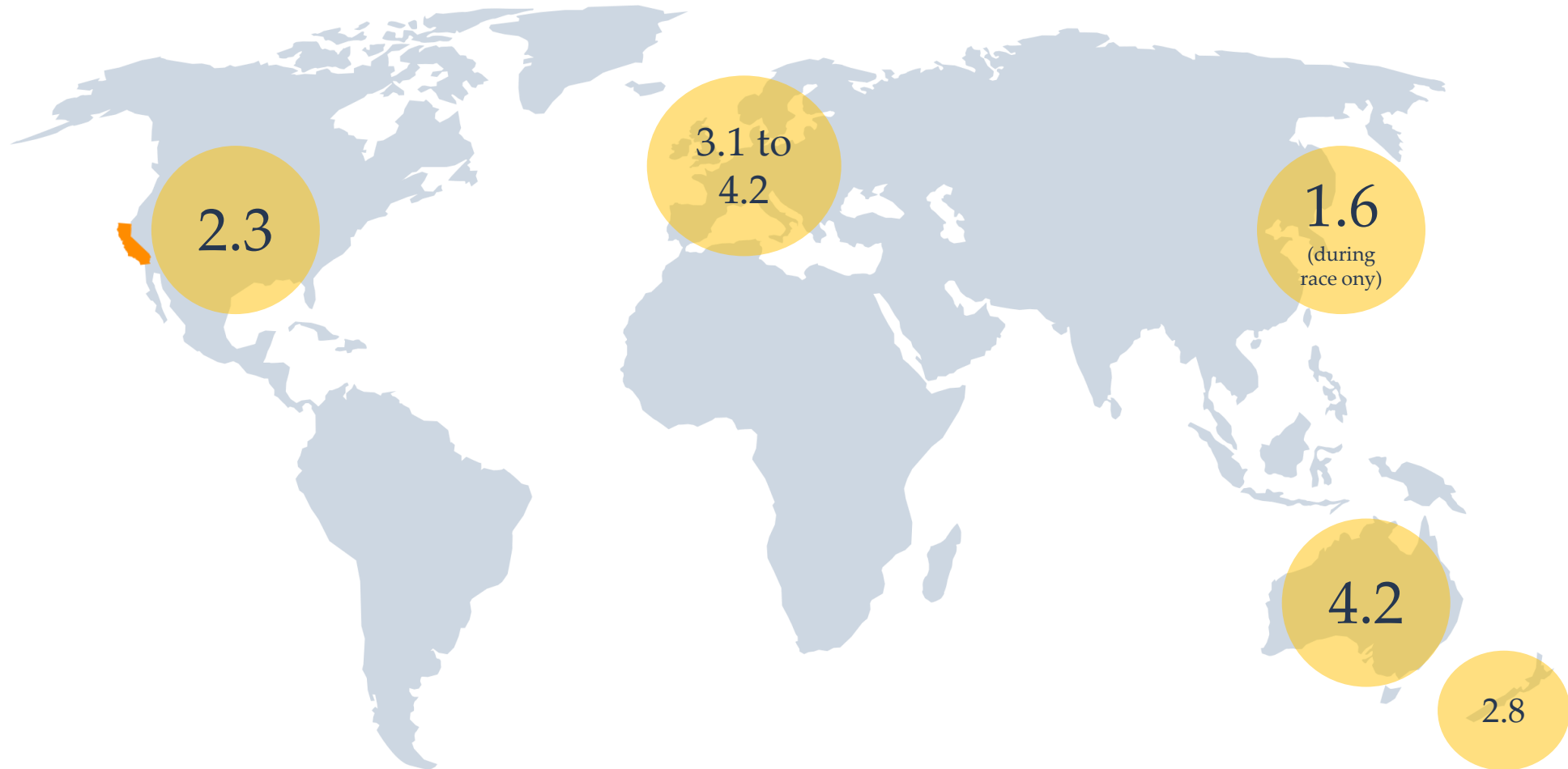
- 8 jockey and trackwork rider deaths
- 5 of them related to fatal racehorse injuries

Background | Previous research

Research has determined:

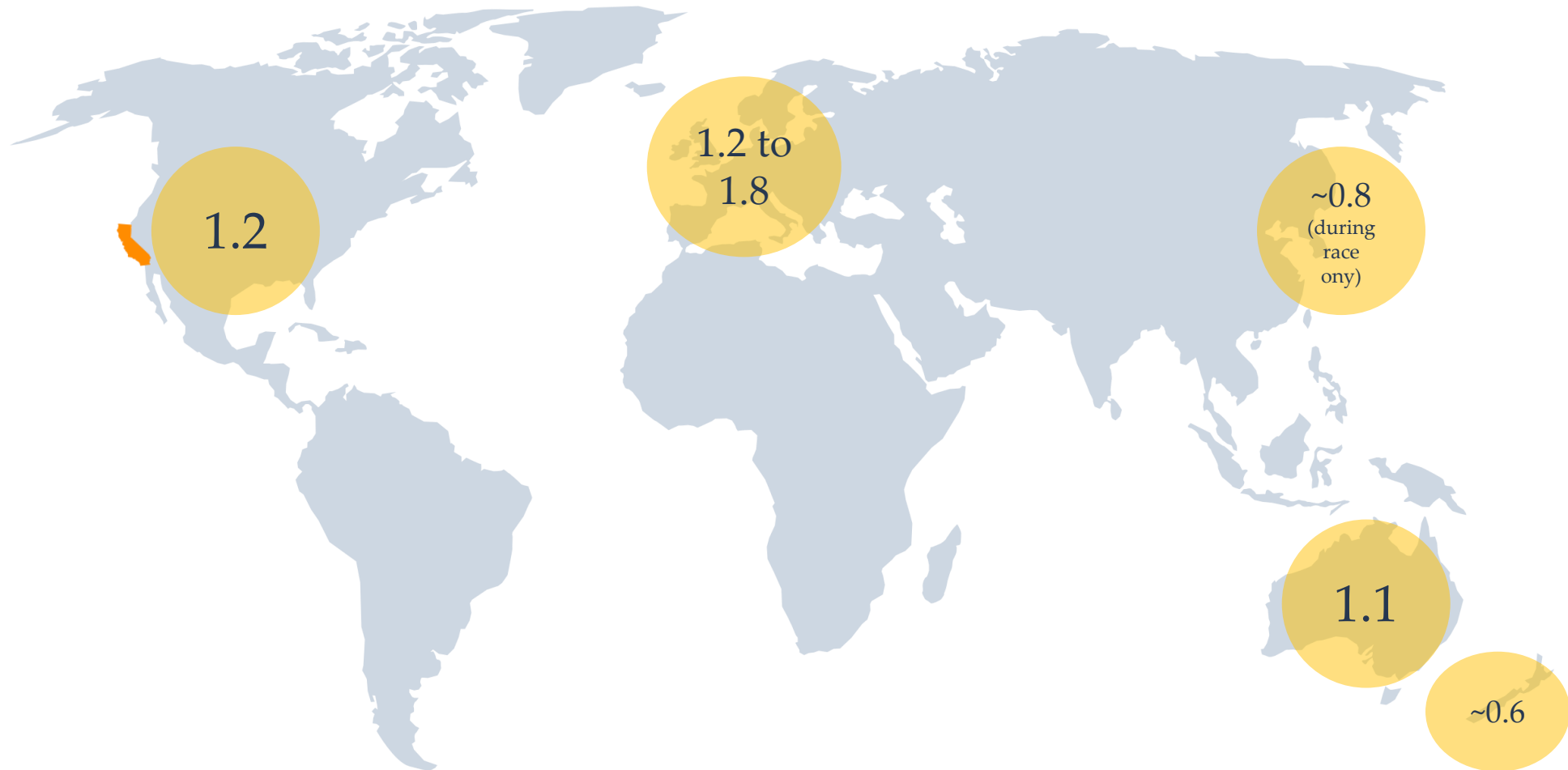
- Incidence of jockey falls and injuries
- Risk factors for jockey falls and injuries (Australia)
- Association between racehorse fatality and jockey injury

Jockey falls per 1000 flat race rides by country



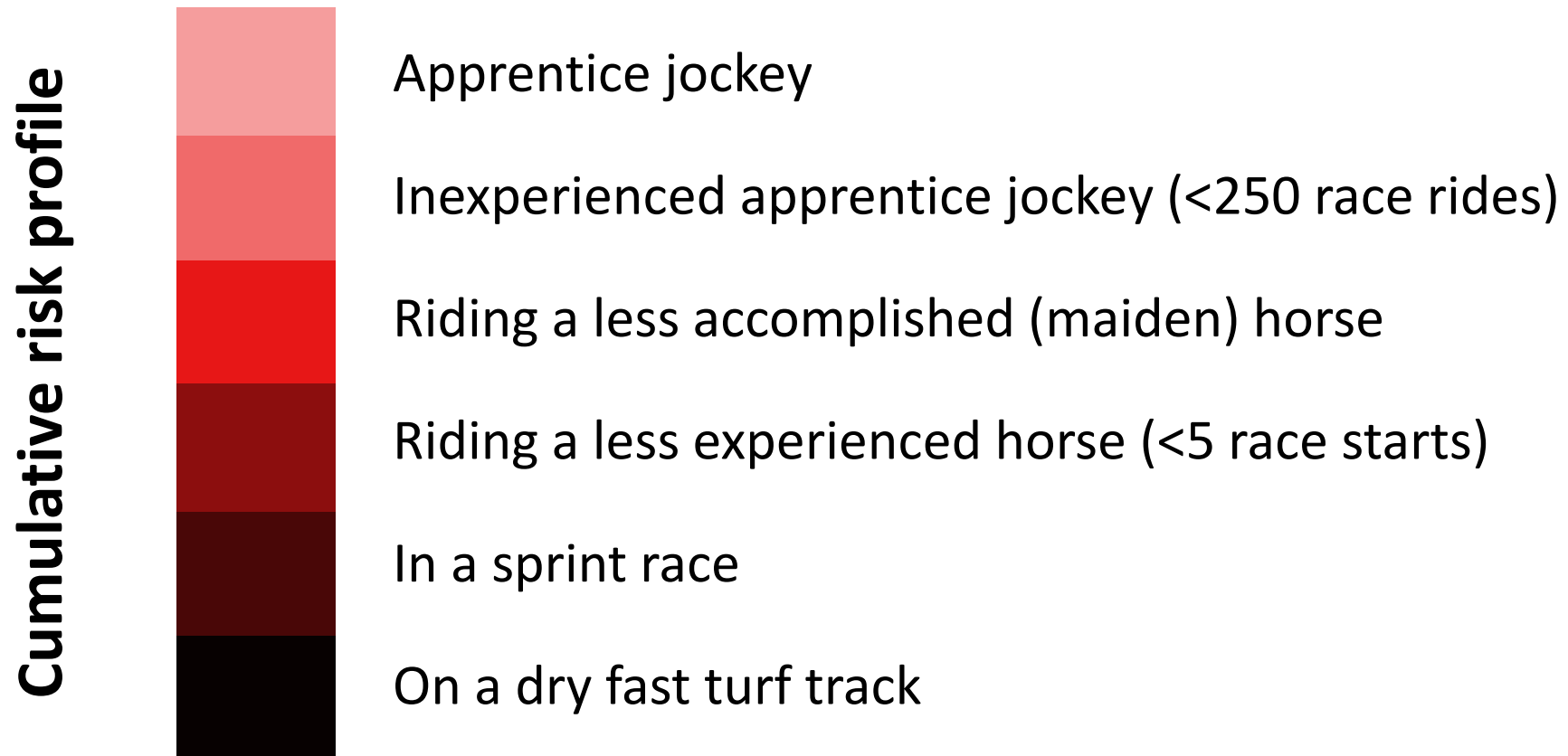
Oikawa 2004; Turner et al. 2004; McCrory et al 2006; Hitchens et al. 2009, 2013; Bolwell et al. 2014

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



Hitchens et al. 2010, 2012

Hypothesis

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

BUT

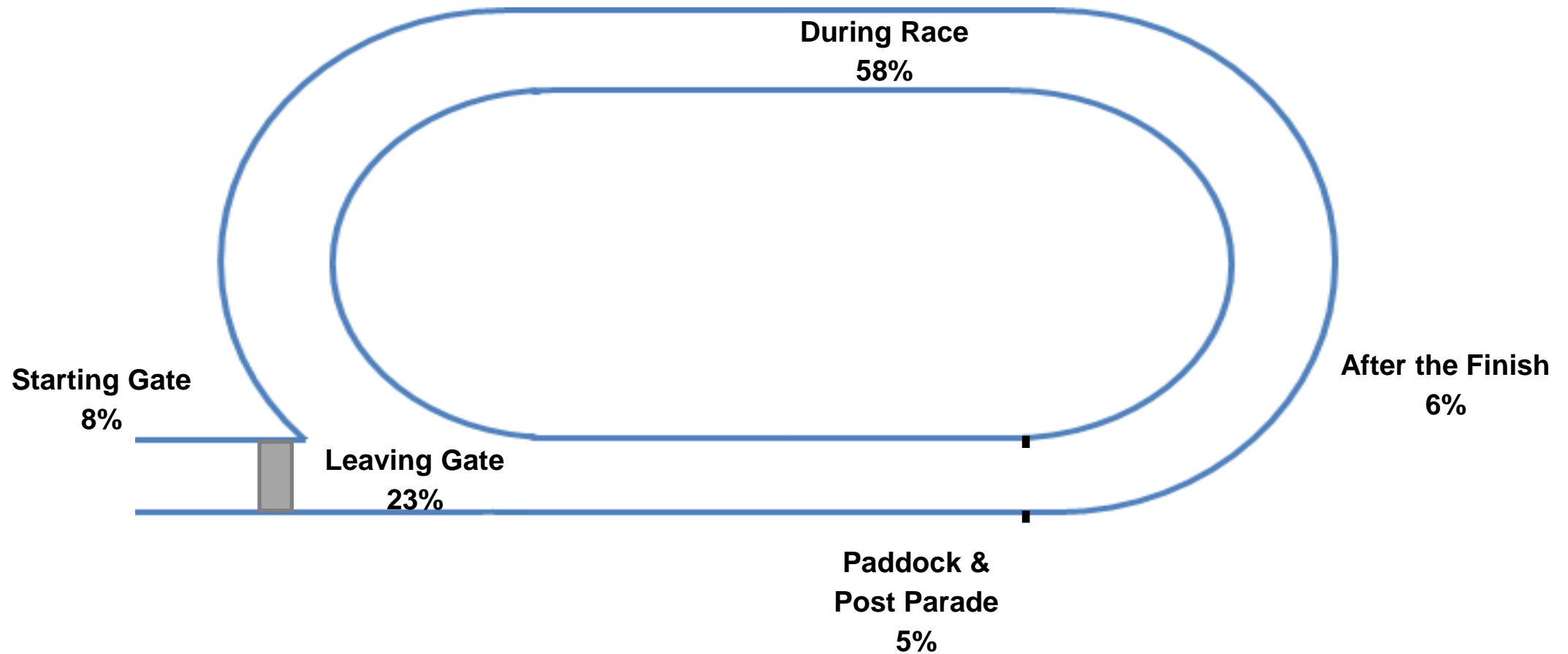
We had not yet linked data on racehorse injuries with jockey injuries

Methods | Data sources

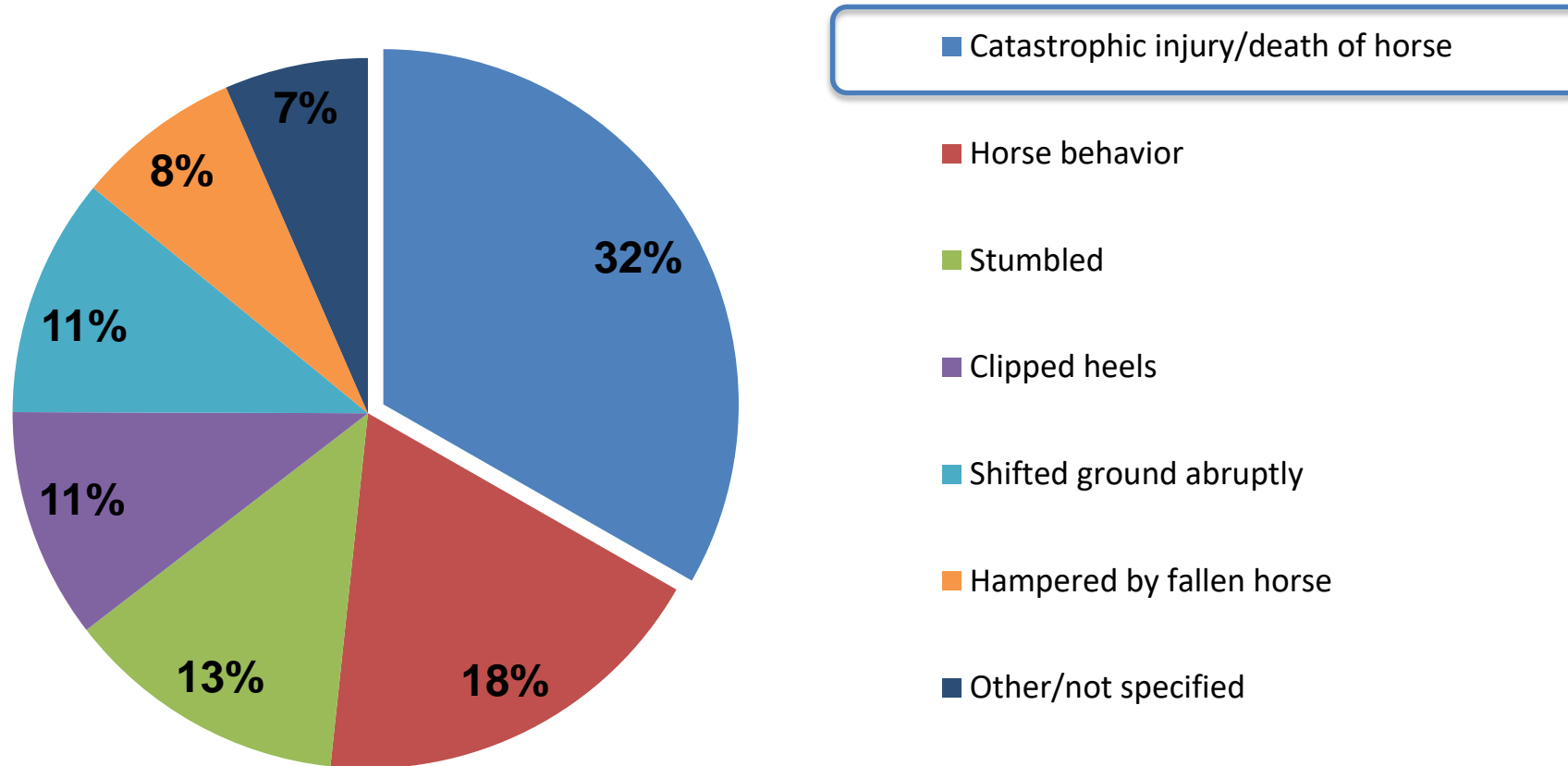
- California Jockey Accident Database, 2007 to 2012
 - 325 injuries and 601 falls from 264,055 race rides
- Falls and injuries identified from jockey accident reports (Stewards)
- Racehorse fatality data from the CHRB Postmortem Examination Program database

Hitchens et al. 2013, 2016

Results | Jockey fall location



Causes of jockey falls | racehorse fatality



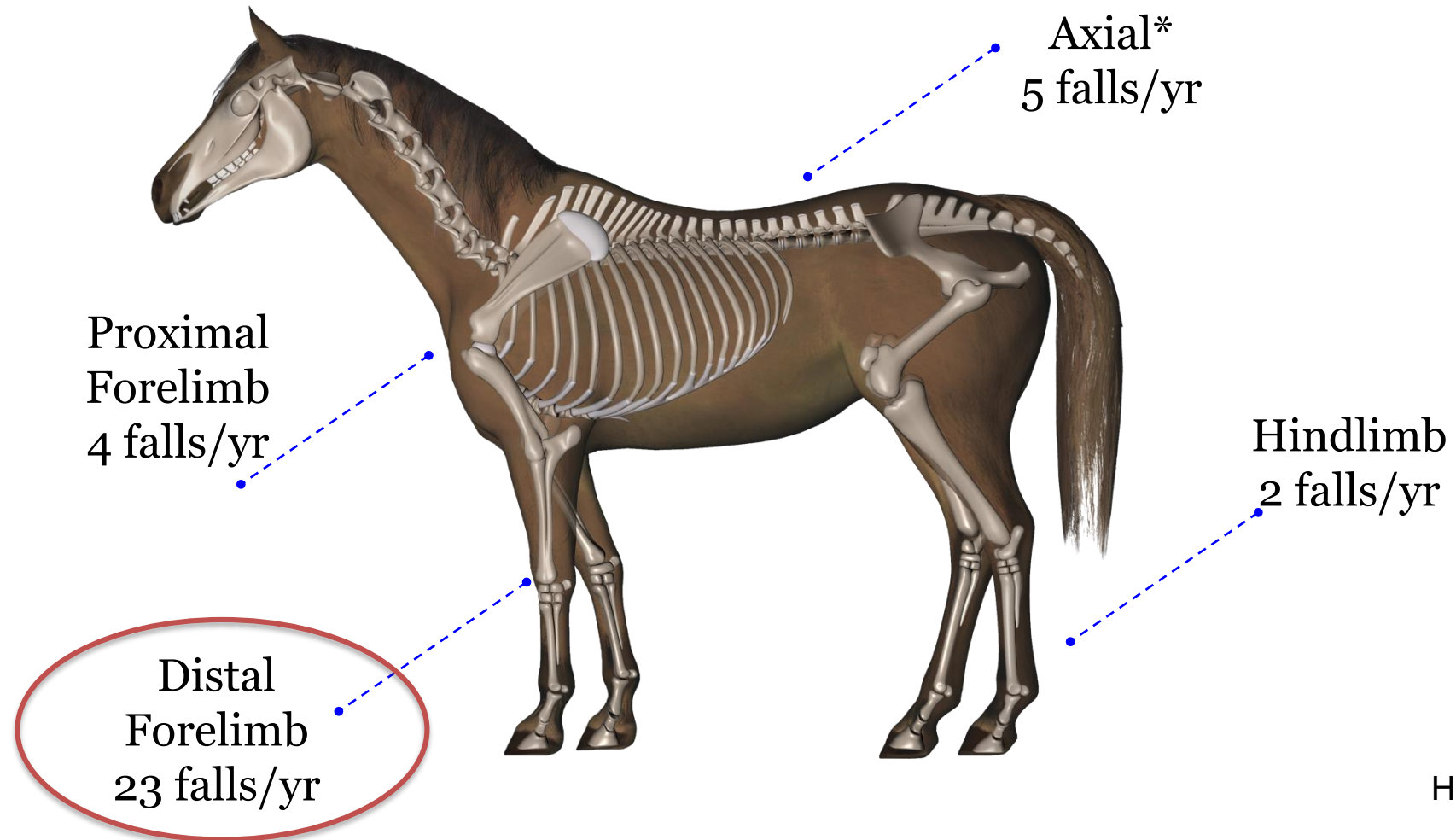
Hitchens et al. 2013

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

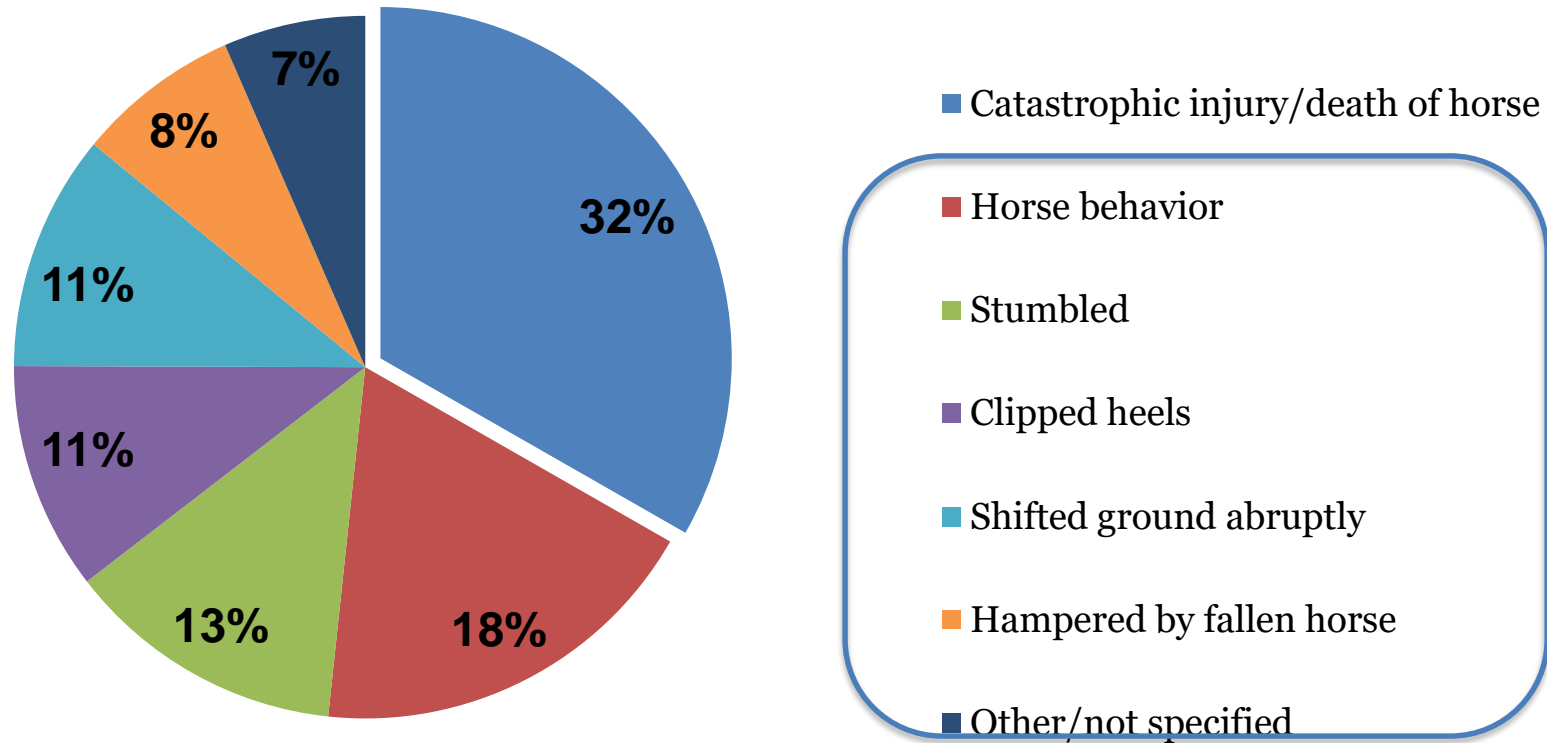


Hitchens et al. 2016

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



Hitchens et al. 2013

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



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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



Benoit Photography/Arcadia, CA

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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