



Admissions to Royal Perth Hospital with horse-related injuries

The Royal Perth Hospital Trauma Registry (RPH-TR) has collected and reported on injury data since August 1994. It contributes to a State Trauma Registry database, combining data from all Perth tertiary hospitals and Joondalup Health Campus.

Included on the RPH-TR are all trauma patients presenting to RPH for treatment within seven days of their injury and who were hospitalised for >24hrs, as well as all trauma-related deaths regardless of hospital length of stay.

Injuries are categorised into Minor (Injury Severity Score (ISS) <16); and Major (ISS >15)

From 2010 to 2019, 679 patients were admitted to RPH with injuries attributed to horse-related trauma mechanisms such as falls, being thrown, struck by, crushed, kicks, bites, stepped on (stomped or trampled), entangled in stirrup, and entangled in reins.

Of the 679 patients that were admitted to RPH from horse-related injuries from 2010 to 2019:

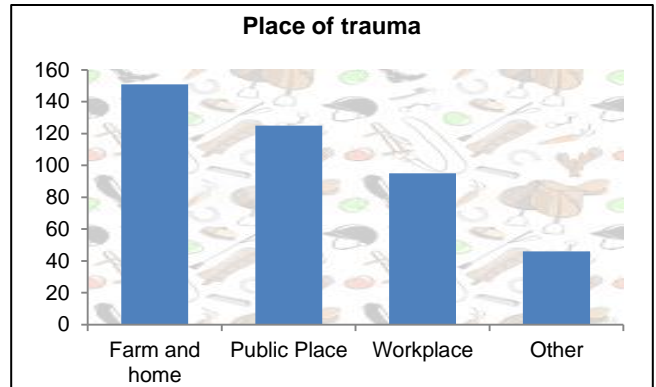
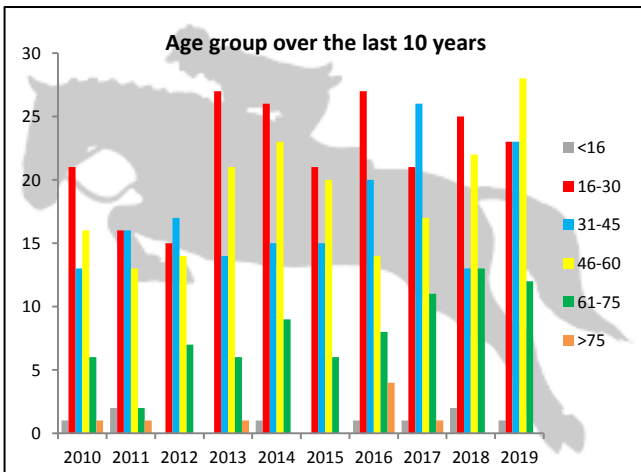
175 (25.8%) were males; 504 (74.2%) were females

222 (32.7%) were 16-30 year olds, who are traditionally most at risk, apart from a spike in 46-60 year olds in 2019

- 407 (59.9%) injuries occurred in the metro area
- 271 (39.9%) occurred in the regional areas

Location of trauma varied for the 679 patients:

- 262 (38.6%) unknown
- 151 (22.2%) farm/home
- 125 (18.4%) public place
- 95 (14%) work related
- 46 (6.8%) other



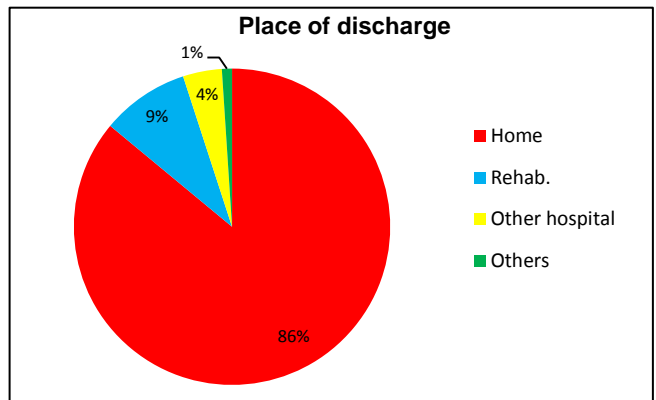
The injuries sustained were diverse, from minor lacerations and broken bones to major crush, spinal, head injuries and death. From 2010 – 2019:

- 595 (87.6%) patients sustained Minor injuries, with an ISS <16
- 84 (12.4%) patients sustained Major injuries, with an ISS >15
- 72 (10.6%) were not wearing a helmet
- 229 (33.7%) safety equipment was not recorded.

Patients with minor injuries had a median ISS of 5 and an average length of stay (LOS) of 3.6 days.

Patients with major injuries had a median ISS of 20 and an average LOS of 9.3 days.

- 584 (86%) were discharged home
- 61 (9%) were sent for further rehabilitation
- 27 (4%) were sent to another hospital for step down care



Horse riding is a female dominated sport so not surprisingly the large majority of injuries are to females. Over the last ten years, the numbers of injuries and admissions from most age groups have gradually increased, however the over 60s have doubled. As horse riders get older they need to be more aware of the potential for serious injury in this environment, as well as the importance of wearing adequate safety gear.