



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, Midland SJoG 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) <13); and Major (ISS >12)

From 2013 to 2023, 158 patients were admitted to RPH with major injuries attributed to horse-related trauma mechanisms. These include but not limited to; falls, being thrown, struck by, crushed, kicks, bites, stepped on (stomped or trampled), entangled in stirrup or reins and equipment not fitted properly.

Of the 158 patients that were admitted to RPH with major injuries from 2013 to 2023:

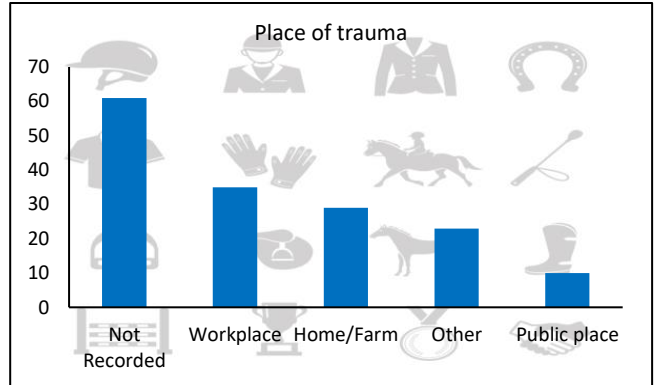
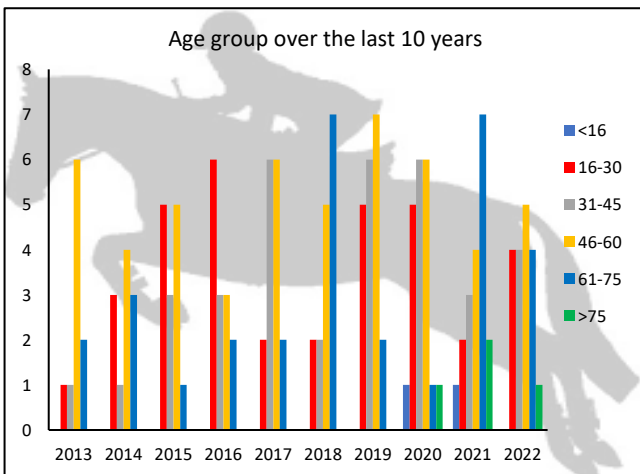
46 (29.1%) were males; 112 (70.9%) were females

35 (22.2%) were 16-30 year olds, who are traditionally most at risk, however, the 46-60 year old were the largest with 51 (32.3%)

- 85 (53.8%) injuries occurred in the metro area
- 73 (46.2%) occurred in the regional areas

All 158 patients had major injuries with an ISS ranging from 13 – 75. They had a median ISS of 24.5 and an average LOS of 6.5 days

- 48 (30.4%) rode for their profession
- 110 (69.6%) were riding for recreational purposes



Location of trauma varied for the 158 patients:

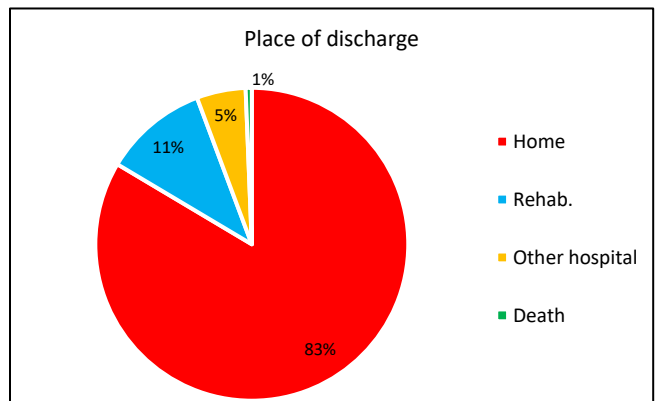
- 61 (38.6%) unknown
- 35 (22.2%) work related
- 29 (18.4%) farm / home
- 23 (14.6%) other
- 10 (6.3%) public place

The injuries sustained were diverse from minor lacerations and broken bones, to major spinal injuries, head injuries and death. From 2013 – 2023:

- 42 (26.6%) were not wearing a helmet
- 36 (22.8%) safety equipment was not recorded.

Of the 158 patients:

- 132 (83.5%) were discharged home
- 17 (10.8%) were sent for further rehabilitation
- 8 (5.1%) 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 number of injuries and admissions from most age groups have gradually 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.