



Quad bike accidents requiring admission to Royal Perth Hospital

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 their length of stay in hospital.

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

Data from the RPH-TR has revealed that between 2010 and 2019, there were 250 trauma patients admitted to RPH with significant injuries related to quad bike accidents.

Quad bikes are three or four wheeled motorised unlicensed vehicles originally used for farming. The popularity of these vehicles for recreational purposes continues to result in a high number of presentations to Royal Perth Hospital (RPH) with significant injuries as a result of off-road quad bike-related trauma.

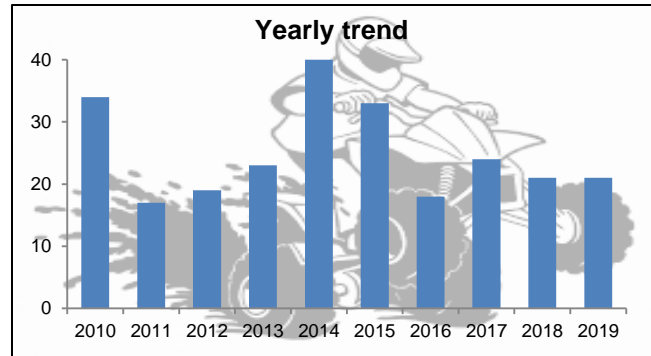
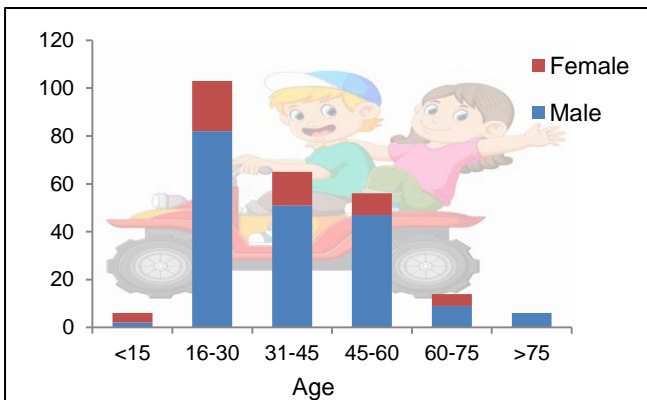
- 197 (78.8%) males and 53 (21.2%) females

With an age range of 14 to 83 years, the two most common age groups were:

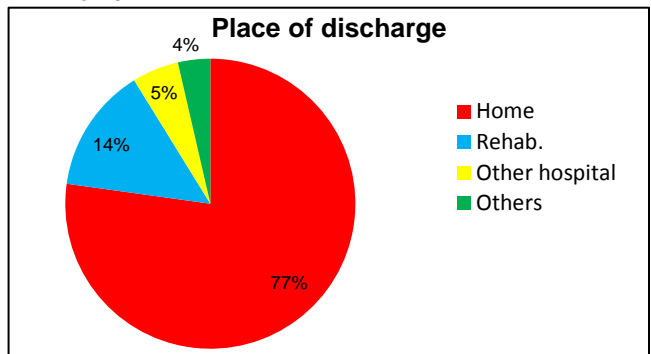
- 103 (41.2%) aged between 16 and 30 years
- 65 (26%) aged between 31 and 45 years

Location of quad bike accidents:

- 109 (43.6%) off road
- 38 (15.2%) farm
- 22 (8.8%) road
- 10 (4%) home, and
- 71 (28.4%) other



- Drug and/or alcohol use was reported in at least 75 (30%) of cases (mostly self-reported so almost certainly under reported)
- 108 (43.2%) were reportedly not wearing any form of safety device; a further 41 (16.4%) were unknown
- 231 (89.2%) were the rider and 22 (8.5%) were the pillion passenger, and 6 (2.3%) were other/unknown
- 121 (48.4%) were driving less than 60kmh, 44 (17.6%) at 60 - 100kmh and 2 patients (0.8%) >100kmh; Speed was not recorded in 83 (33.2%) patients
- 60 (24%) were categorised as major traumas with an ISS of >15
- The average length of stay at RPH was 5.1 days for a minor trauma patient and 14.8 days for a major trauma patient, with 193 (77.2%) patients discharged home.



Quad bike riding is an acknowledged form of recreation. However it is important that the public are made aware of the dangers associated with unregulated, off road quad bike use. Riders and pillion passengers must remember to take the necessary precautions to prevent the crashes, and wear the appropriate safety gear to prevent and minimise subsequent injuries that can, and do, occur with devastating consequences.