



Admissions to Royal Perth Hospital from E-rideable 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 SJoG Midland 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)

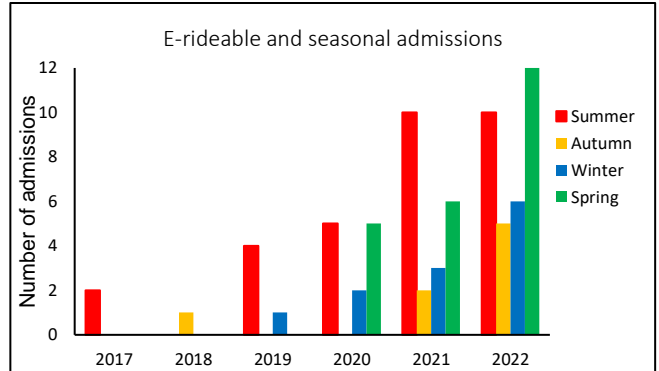
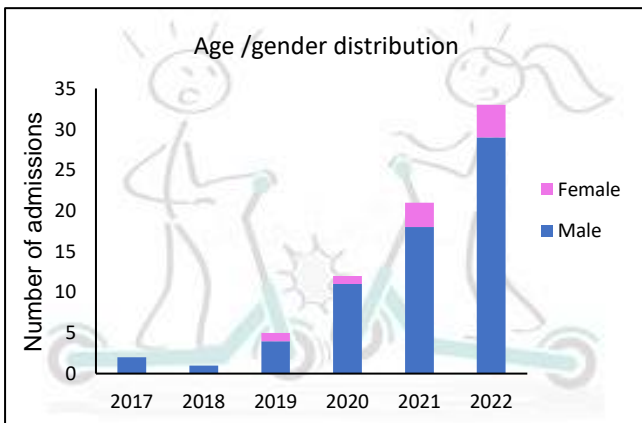
Electric rideable (e-rideable) crashes can occur anywhere such as on or off the road, at home, in a park and may or may not involve another vehicle. From 2017 to 2022 there were 74 admissions of people who sustained a major injury as the result of an e-rideable related trauma. There has been a steady increase in the number of admissions from 2 in 2017 to 33 in 2022.

Overall, males continue to outnumber females in every age group: 65 (87.8 %) versus 9 (12.2 %).

With an age range of 16 to 78 years old, the most common age group was 31 - 45 years old, with 32-year-old's representing the highest in the age bracket (43.2 %). Within this group, 28 (37.8 %) were male and 4 (5.4%) were female

Overall, of the e-rideable patients:

- 40 (54.1 %) patients did not wear a helmet. 2 (2.7 %) cases had no safety device recorded
- 29 (39.2 %) had documented consumption of alcohol and/or drugs, and of these none were wearing a helmet.



64 (86.5%) of e-scooter crashes occurred in the metro area and 10 (13.5%) in regional areas:

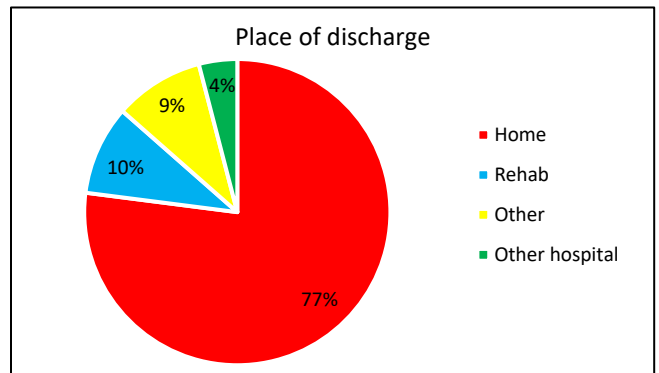
- 37 (50 %) occurred on an e-scooter
- 20 (27 %) on an e-skateboard
- 17 (23 %) on an e-bicycle

The majority of e-rideable crashes occur in the warmer months with 52 (70.3%) in October – March.

January - March – 14 (18.9 %) patients were admitted
 April - June – 10 (13.5%) admitted
 July - September – 12 (16.2%) admitted
 October - December – 38 (51.4%) patients admitted

With the increasing number of e-rideable crashes, there has been a corresponding increase in injury severity:

- All 74 patients sustained major injuries with a median injury severity score (ISS) of 20.2 and the average length of stay was 7.2 days for the trauma patient
- 57 (77%) of patients were discharged home



As popularity increases, the number of e-rideables on our roads is increasing. Most crashes occur in the metro area, with the majority occurring in the warmer months. The overall severity of injuries has also increased. Use of safety devices and mutual vigilant awareness and respect between all road users is paramount to prevent these trauma admissions.