

# 10 years of road trauma admissions 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 hospital length of stay.

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

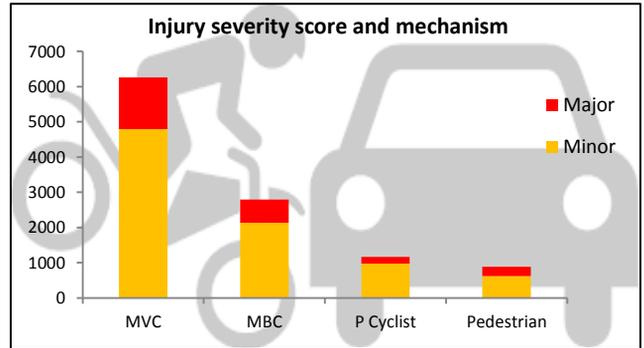
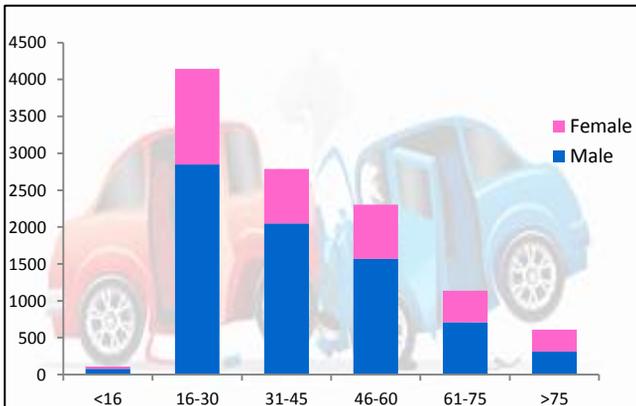
From 2010 to 2019, 11,091 patients involved in road trauma were admitted to RPH for more than 24 hours. This report looks at all aspects of road trauma, from mechanism to discharge.

Of the 11,091 patients admitted:

- 7565 (68.2%) were male,
- 3526 (31.8%) were female
- 7665 (69.1%) road trauma crashes occurred in the metropolitan area
- 3321 (29.9%) were in regional WA.
- 105 (0.9%) of trauma incidents occurred either interstate or overseas
- 4145 (37.4%) of admissions were the 16 - 30 age group and was the most represented age group of both genders.

The majority of crashes occurred at speeds of 60-100kph. Of the 8808 incidents where speed was documented:

- 3078 (58.9%) of motor vehicle crashes (MVC) were at 60-100kph
- 1224 (51.8%) of motorbike crashes (MBC) were at 60-100kph



Of the 11,091 admissions:

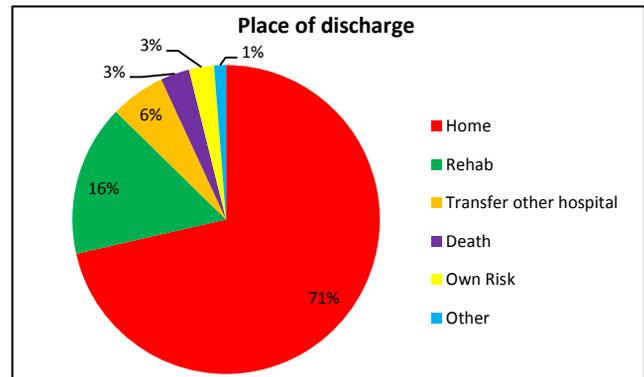
- 6260 patients (56.4%) were from a MVC
- 2789 patients (25.1%) had a MBC
- 1160 (10.5%) were pedal cyclists
- 882 (8%) were pedestrians

Of 10,411 admissions where safety devices were recorded:

- 1198 (11.5%) did not use safety devices such as helmets and seatbelts (27% of rear seat passengers had no seatbelt)
- 2307 (20.8%) had consumed alcohol
- 651 (5.9%) had used drugs

Of the 11,091 admissions,

- 2572 (23.2%) major trauma patients had an ISS of 22 with a median Length of Stay (LOS) of 15.6 days.
- 8519 (76.8%) of minor trauma patients had an ISS of 5 with a median LOS of 4.9 days.
- 7923 (71.4%) were discharged home



The number of traumas on the roads is increasing each year. As vehicle safety improves, this report shows that increased speeds and safety device non-compliance continue to be factors in road trauma. Safety measures must be continually emphasised. Despite public road safety awareness programs, alcohol and drug use is on the rise in drivers, and the 16-30 age group continues to be over represented.