10 years of Easter road trauma at 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)

On a Western Australian (WA) Easter long weekend, road trauma admissions typically start increasing on Thursday evening and continues over Good Friday, Saturday, Easter Sunday and Easter Monday. From 2010 to 2019, 128 patients involved in road trauma were admitted to RPH over the Easter period. There was a sharp increase in 2017, with 23 patients admitted over the long weekend and 24 in 2018 but this dropped to 15 in 2019.

- 78 (60.9%) patients were male,
- 50 (39.1%) patients were female.

Of the 128 road traumas: 84 (65.6%) occurred in the metropolitan area and 41 (32%) occurred in regional WA.

The 15 - 30 age group was the most represented age group with 52 (40.6%) admissions.
- Of these, 32 patients were male and 20 were female.
- 12 (9.4%) aged over 60 had the least admissions

Known use of safety equipment:
- 5 (7.2%) patients involved in a motor vehicle crash (MVC) were not wearing a seatbelt.
- 4 (13.3%) patients in a motorbike crash (MBC) were not wearing a helmet
- 2 (11.1%) pedal cyclists were not wearing a helmet

Since 2010, both minor and major injuries have increased.
- 20% of patients who were travelling at speeds greater than 100 kilometres per hour (km/h) had a median ISS of 12. 35% were a major trauma.
- 21% of patients were driving less than 60km/h. They had a median ISS of 5 and 19.1% were major trauma.

Of the total 128 admissions, 26 (20.3%) were major trauma patients and had a median ISS of 24 and an average length of stay (LOS) of 12.3 days.
- 102 (79.7%) were minor trauma patients and had a median ISS of 5, with an average LOS of 5.6 days.
- 29 (22.7%) and 13 (10.2%) of patient admissions respectively involved alcohol and drugs.
- 69 patients (53.9%) were as a result of a MVC.
- 30 patients (23.4%) were as a result of a MBC.

Easter weekend is typically the last warm long weekend before winter, so many people choose to travel. As this report shows, the lack of safety device compliance, faster speeds and alcohol and other drugs contribute to trauma admissions. Long weekends are also associated with a heavier police presence on the roads and the penalty of double demerit points. But despite these interventions, as well as safety measures increasing with cars, the number and severity of injuries continue to grow.