

10 years of sporting and recreational injuries

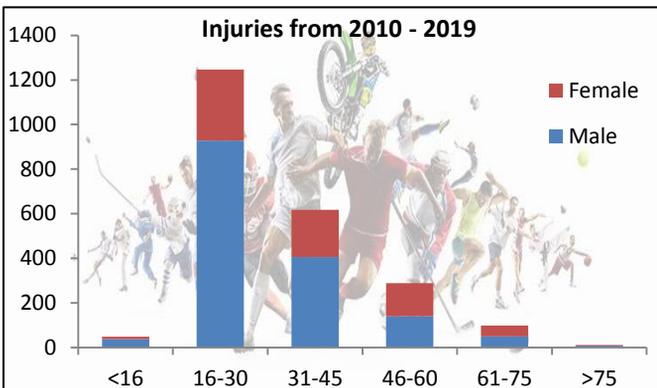
The Royal Perth Hospital Trauma Registry (RPH-TR) has collected and reported on injury data since August 1994. It contributes to a State Trauma Registry database, combining data from all Perth tertiary hospitals and Joondalup Health Campus.

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.

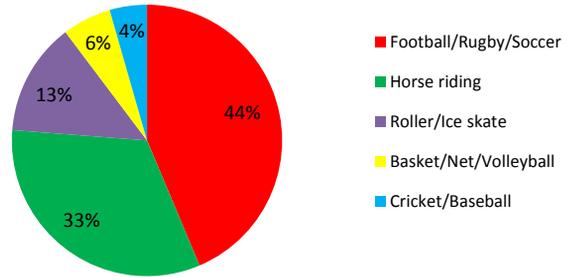
Injuries are categorised into Minor (Injury Severity Score (ISS) <16); and Major (ISS >15)

Sport and recreational physical activity is an integral part of our society, and participation in recreational physical activity is widely promoted as part of a healthy lifestyle. From individual or team sports, to extreme sports, all physical activities carry some risk of injury. Injuries can result from accidents, inadequate training, improper use of protective devices, or insufficient stretching or warm-up exercises.

- From 2010 to 2019 there was a total of 2311 sporting or recreational-related admissions which reached a peak in 2014 of 270. Males dominate the admissions at 67.7%, however, female admissions have gradually increased from 27.8% in 2009 to 40% in 2019.
- As the majority of sport played is by the 16-30 age group it is no surprise that this was the largest with 1247 admissions. The 61+ age group had 109 admissions over the ten year period, with 73 (65.8%) of these from horse riding.
- Over the ten year period, the most common body regions where injuries occurred are: 2423 (40.4%) injuries to the extremities, followed by external injuries 1239 (20.6%), head and neck 991 (16.5%), chest 572 (9.5%), face 455 (7.6%) and 321 (5.3%) abdominal injuries.



Top five sporting mechanisms of injury

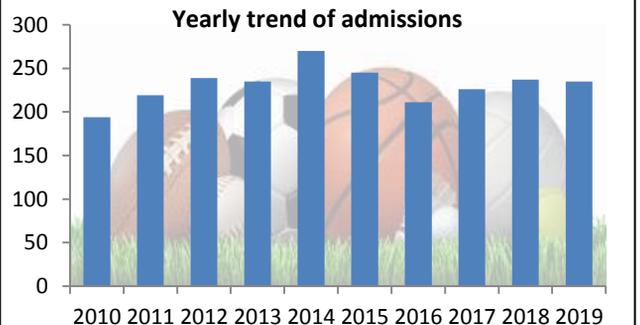


The Mechanism of sporting injuries were:

- Football / rugby & soccer: 910 admissions (39.4%)
- Horse riding: 679 (29.4%)
- Roller-skate / blade & ice skating: 281 (12.2%)
- Basketball / netball & volleyball: 122 (5.3%)
- Cricket & baseball: 93 (4%)
- Other: 84 (3.6%)
- Aerobic / ballet / trampoline: 58 (2.5%)
- Fight sports: 44 (1.9%)
- Go Karting: 29 (1.3%)
- Indoor sports: 11 (0.5%)

In 2019, the median length of stay at RPH was 3 days for minor trauma admissions, with a median ISS of 4, and 6.9 days for major trauma admissions, with a median ISS of 20. 91.5% of patients were discharged home.

Yearly trend of admissions



This report shows the majority of injuries are from the younger age groups who also tend to be the main group doing sports. However, warming up and stretching before any exercise is essential to preventing sports related injuries. Older adults and exercisers don't tend to engage in contact sports and are far more likely to suffer an injury due to degenerative changes making them more susceptible. Physical activity guidelines minimise the risk of injury in sports and recreational activities, while maximising the public health gain from prevention of obesity and other inactivity related disease.