Adult on-road cyclist injury in Victoria, 2008/09 to 2017/18
A report on ambulance attendances, emergency department presentations, hospital admissions and deaths

The following has been extracted from the Victorian Injury Surveillance Unit’s (VISU) latest issue of Hazard (#87) prepared in collaboration with Ambulance Victoria. VISU is based at the Monash University Accident Research Centre (MUARC).

While the benefits of riding a bicycle are well established, it is not without risk, with bicycle riders considered to be one of the most physically vulnerable road user groups due to their limited protection and low tolerance to the forces associated with collisions, especially when motor vehicles are involved.

The scope of this Hazard is limited to on-road/traffic-related injured pedal cyclists or passengers aged 15+ years in Victoria.

In the most recent 3 years (2015/16-2017/18):
- **Ambulance attendances**
  - 4960 ambulance attendances
  - 74% male
  - 43% aged 25-44 years
  - 64% involved a car or equivalent
  - 81% taken to hospital

- **ED presentations**
  - 9640 ED presentations
  - 76% male
  - 46% aged 25-44 years
  - 33% injuries were bone fractures
  - 31% admitted to hospital

- **Hospital admissions**
  - 6301 hospital admissions
  - 77% male
  - 66% aged 30-64 years
  - 44% non-collision transport crashes
  - 57% injuries were bone fractures

- **Deaths (2007-2017)**
  - 82 cyclist deaths
  - 90% male
  - 42% aged 45-64 years
  - 39% caused by collision with car/van

**KEY FINDINGS**

**On-road cyclist injury: 2008/09-2017/18 (10 years)**
Total & average age-standardized rates
- 14,546 ambulance attendances - 31 per 100,00 population
- 32,015 ED presentations – 69 per 100,000 population
- 17,496 hospital admissions – 37 per 100,00 population

**On-road cyclist injury admission rates (10 years)**
- Highest average annual rate was for males 35-44 years (76.1/100,000) and females 25-34 (24.9/100,00). Highest annual rate change was for males 55-64 and 65-74 years (+7.7%), and females 65-74 years (+7.3%) and 45-54 years (+6.1%).

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**On-road cyclist injury: Place of occurrence**
During 2015/16 to 2017/18, ambulance attendance locations in terms of Local Government Areas (LGAs) were highest in the City of Melbourne (1014), Bayside City Council (263) & Darebin City Council (252).

**On-road cyclist injury: Group riding**
Group or bunch riding incidents were identified in ambulance attendance data via text search: 136 records (3%). Males accounted for 83% of group riders while riders aged 45+ years represented 70%.

**On-road cyclist injury: Males, 45+ years**
From 2015/16 to 2017/18, male cyclists aged 45+ years accounted for 33% of ambulance attendances, 27% of ED presentations and 35% of hospital admissions for on-road adult cycling injury.

Hospital treatment costs (direct & indirect) for adult on-road cyclist injury admissions totalled **$41.3 million**
Males aged 35-64 years accounted for 45% of admission costs **$18.6 million**

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