In Western Australia 2007 - 2011 there were 1,059 DEATHS DUE TO ROAD TRAUMA.

In Western Australia Aboriginal people make up 3.8% of the population, however between 2008 and 2012 7% of road trauma hospitalisations were Aboriginal People.

In 2008 - 2012, there were 30,780 hospitalisations due to road trauma, with 71% male and the age range being 25-44 years. More injuries occur in October - December.

The cost of hospitalisations due to road trauma in 2012 was approximately $21,576 bed days and $50,285,935.

Age-standardised hospitalisation rates expressed per 100,000 person years.
Impact of Road Trauma on Western Australia

WHO DOES IT IMPACT?

In Western Australia between 2007 and 2011, there were 1,059 deaths due to road trauma.\(^2\)

It is estimated that there is an average of 13 people affected by every road death.\(^1\)

In Western Australia between 2008 and 2012 there were:

- 30,780 hospitalisations due to road trauma.\(^3\)
- 71% of hospitalisations for road trauma were males.\(^3\)
- people aged 25 - 44 had the highest incidence of road trauma.\(^3\)

In Western Australia Aboriginal People make up 3.8% of the population, however between 2008 and 2012 7% of road trauma hospitalisations were Aboriginal People.

WHEN DOES IT OCCUR?

In Western Australia between 2008 and 2012, hospitalisations were greater during the months of October (9.2%), December (8.9%) and November (8.8%).

WHERE DOES IT OCCUR?

In Western Australia between 2008 and 2012, the regions with the top three age-standardised rates for hospitalisations for road trauma, were the Kimberley (536.0), Wheatbelt (510.4) and the Pilbara (441.4).\(^4\)

The age-standardised hospitalisation rates are standardised with the Australian 2001 population and expressed per 100,000 person years.

IMPACT ON THE HEALTH SYSTEM

In Western Australia in 2012, there were 6,364 hospitalisations for road trauma, consuming an estimated 21,576 bed days at an approximate cost of $50,285,935.\(^4\)
Determinants of Road Trauma (Risk / Protective Factors)

**SOCIAL DETERMINANTS**

**INCOME AND SOCIOECONOMIC STATUS**

Residents in lower socioeconomic areas experience much higher rates of death and hospitalisation due to road trauma. It has been suggested that this is due to more exposure to risky driving environments and behaviours.⁵

**ENVIRONMENTAL, COMMUNITY AND ORGANISATIONAL DETERMINANTS**

**ROAD DESIGN**

Many factors that make up road design affect how safe that road is for drivers, cyclists and pedestrians. Aspects that increase safety include:

- Presence of roundabouts instead of right-hand turns
- Sealed roads, particularly in rural areas
- Barriers to separate traffic
- Speed limits.⁶

**BEHAVIOURAL AND INDIVIDUAL DETERMINANTS**

**DRINK DRIVING**

Drink driving, that is with blood alcohol content (BAC) level of over 0.05gm% results in significant impairment of driving skills and is therefore the legal limit for all fully licensed drivers.⁶

**DRUG DRIVING**

Similar to drink driving, there are numerous drugs other than alcohol that can impair a person’s ability to drive and increase their risk of crashing.⁷

**SPEEDING**

Speeding is the most common problematic behaviour of drivers. The risk of crashing and the severity of injury increase with higher speeds of travel and is therefore a serious risk.⁶

**SEATBELTS AND CHILD RESTRAINT USE**

Seatbelts and child restraints prevent people from moving too far in the event of a crash and therefore dramatically reduce the likelihood of injury.⁶

**DRIVER FATIGUE**

Driver fatigue is known to be an important determinant of road crashes.⁶
AGE
Young drivers (aged 17 to 24) are known to have a greater risk of crashing even with lower BAC levels due to the combination of their lack of driving experience, as well as alcohol consumed.\(^6\)

DISTRACTIONS
Driver distraction significantly contributes to road crashes. Adequate concentration is required to avoid hazards and anticipate actions. Approximately 15% to 20% of driver distractions involve people using technology while driving.\(^8\)

Effective Interventions

LEGISLATION, POLICIES, STANDARDS AND CODES OF PRACTICE

ROAD SAFETY LEGISLATION
Western Australia has legislation that determines appropriate behaviour around each of the behavioural determinants listed in the previous section. For example,

- Drink/drug driving: For a full licence holder, it is an offence to drive with a BAC level equal to or exceeding 0.05gm%.\(^6\)
- Speeding: All public roads in Western Australia have speed limits ranging from 40km/h to 110km/h.\(^6\)
- Seatbelt use: Everyone inside a motor vehicle must be wearing a seatbelt at all times and all vehicles must have a seatbelt fitted in every seating position.\(^6\)
- Child restraints: All children must be adequately secured with child restraints or seatbelts. Drivers are legally responsible for all passengers under the age of 16.\(^6\)
- Fatigue: Reckless driving legislation refers generally to driver behaviour that may be dangerous to the public through a general lack of care, such as driving tired.\(^6\)
- Age: There is a mandatory probationary period of two years for new drivers, during which drivers are not permitted BAC level of any amount.\(^6\)
- Distractions: Drivers are not permitted to be using technology, such as phones, while driving.\(^6\)

Penalties apply to those who do not adhere to this legislation.

Western Australian example
The Western Australian Police are directly responsible for enforcing the Western Australian Road Traffic Act 1975 and the Road Traffic Code 2000. This is done through programs like random breath testing of drivers to determine BAC levels, operating speed cameras and the red light cameras at intersections.\(^6\)
Western Australian example

The Department of Transport, WA are responsible for the development and implementation of policies relating to licensing of motor vehicle drivers. This includes the training program that all drivers must go through in order to become licensed driver.⁶

ENVIRONMENTAL, COMMUNITY AND ORGANISATIONAL INITIATIVES

ENCOURAGING USE OF SAFER MODES OF TRANSPORT

Using safer modes of transport, such as public transport can help reduce the amount of congestion on roads and generally make mobility safer.⁹

Western Australian Example

In Western Australia, the Public Transport Authority run the free CAT service around the Central Business District, as well as free trains between the hours of 12:30am and 3am on Saturday and Sundays to encourage use of public transport.¹⁰

SAFE ROAD DESIGN

Road design considerations and strategies such as classifying roads, setting speed limits improving single-lane carriageways can make a significant contribution to the prevention of road trauma.¹¹

Western Australian Example

Austroads Guide to Road Design is a framework for road designers that promote efficiency in design, construction to ensure consistency and safety for road users and should be used in conjunction with relevant state requirements.¹²

Western Australian Example

Main Roads WA Road Safety Strategy 2011-2015 outlines a number of key policy initiative and areas to prevent road trauma, which includes the development and implementation of an overarching Safe System Framework and principles to guide processes and improve road safety outcomes.

ROAD SAFETY CAMPAIGNS

Community campaigns can be effective in raising public awareness about the legislation around road safety and the consequences of not driving safely.⁵

Western Australian Example

“Towards Zero” is the Western Australian strategy for road safety for 2008-2020. The strategy’s four main elements include safe road use, safe roads and roadsides, safe speeds and safe vehicles, which are achieved through multiple community campaigns centred around these four elements.¹³

“Shine a Light on Road Safety” is a campaign aimed at raising awareness among Western Australians to prevent deaths and injuries due to road trauma.¹⁴
GROUP AND INDIVIDUAL INITIATIVES

USE OF SEATBELTS AND CHILD RESTRAINTS

Child car restraints are an effective strategy for reducing injury to children as a result of a road crash.6

Western Australian example
Kidsafe WA provide information and training in how to fit restraints into a car.15

COUNSELLING

Grief counselling for people affected by road trauma is available through a variety of providers.16

Western Australian Example
Road Trauma Support WA offer grief counselling as well as a variety of support and peer groups aimed at people who have caused, been involved with a crash or had family or friends affected by road trauma.16

Key stakeholders in Western Australia

- Department of Health, Western Australia
- Department of Transport
- Drug and Alcohol Office
- Injury Control Council of Western Australia
- Kidsafe WA
- Main Roads WA
- Office of Road Safety
- Road Trauma Support WA
- Roadwise, WA Local Government Association
- Royal Automobile Club (WA) Inc.
- School Drug Education and Road Aware (SDERA)
- Western Australian Police

For more information download Injury Prevention in Western Australia: A Review of Statewide Activity for Selected Injury Areas
References

3. Department of Health, Western Australia (2015) Specific health condition analysis: Transport accidents hospitalisations by external cause (injury and poisoning) – Western Australia State

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