

Motorcycles and Road Crashes in South Australia



Government
of South Australia

Department for Transport,
Energy and Infrastructure

Motorcycle crashes in South Australia

Each year in South Australia, motorcycle rider fatalities make up around 21% of all vehicle operator fatalities and 13% of all road user fatalities.

The incidence of motorcycle death and serious injury has increased in South Australia over the last decade, and is also increasing as a proportion of all road deaths in South Australia, while other road user trauma has generally decreased. Table 1 shows the number of motorcycle rider fatalities and serious injuries per year for the period 2000-2009.

Table 1: Motorcycle and pillion passenger fatalities and serious injuries, South Australia, 2000-2009¹

| Year | Fatalities | Serious Injuries | | Year | Fatalities | Serious Injuries |
|------|------------|------------------|--|------|------------|------------------|
| 2000 | 16 | 170 | | 2005 | 20 | 136 |
| 2001 | 14 | 169 | | 2006 | 23 | 195 |
| 2002 | 21 | 160 | | 2007 | 8 | 172 |
| 2003 | 13 | 163 | | 2008 | 17 | 184 |
| 2004 | 20 | 166 | | 2009 | 15 | 164 |

Figure 2 shows the number of motorcycle riders and pillion passengers killed or seriously injured on South Australian roads each year since 1999. Over this period, 167 motorcyclists were killed and 1655 were seriously injured.

It also shows the number of motorcyclists killed or seriously injured as a proportion of all serious road casualties. Each year motorcyclists have become a larger part of the road toll increasing from 11% in 2000 of all serious casualties to 15% in 2009.

¹ Please note that motorcycles include scooters in this fact sheet.

Figure 2 – Annual motorcycle and pillion passenger fatalities and serious injuries as a percentage of all road crash fatal and serious injuries, 2000-2009

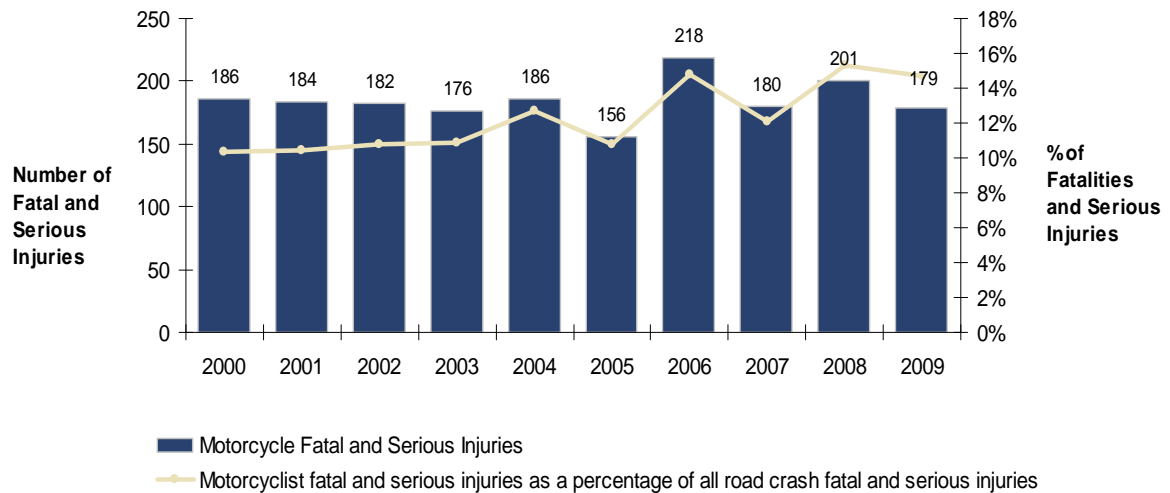


Table 3 below further shows the overrepresentation of motorcyclists on average they account for just above 2% of all registered vehicles but around 14% of all fatalities.

Table 3 – Motorcycle registrations and fatalities– compared with other vehicle registrations and fatalities, 2000-2009

| | Registered motorcycles as a percentage of all registered vehicles | Motorcyclist fatalities as a percentage of all road fatalities |
|-------------------|---|--|
| 2005 | 2.0% | 13.6% |
| 2006 | 2.1% | 19.7% |
| 2007 | 2.2% | 6.4% |
| 2008 | 2.5% | 17.2% |
| 2009 | 2.6% | 12.6 |
| Five year average | 2.3% | 13.9% |

Is motorcycling increasing?

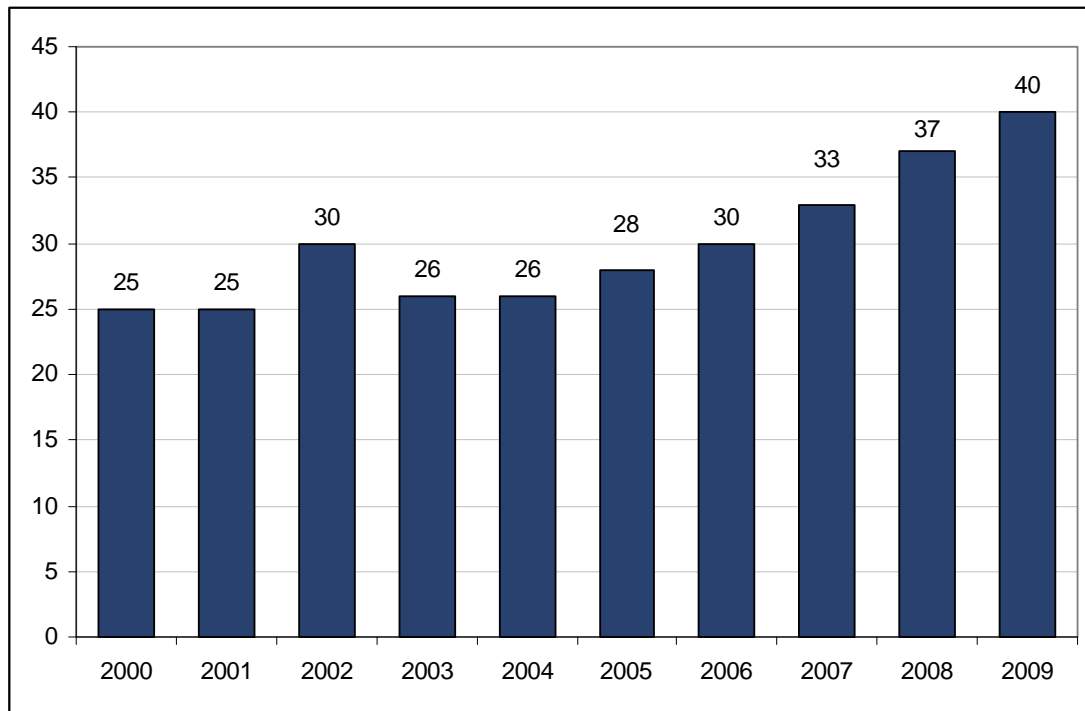
Table 4 shows that the number of registered motorcycles in South Australia has increased by 43% from 28,000 in 2005, to 40,000 in 2009.

Table 4: Number of motorcycles registered, South Australia, 2005-2009

| Year | Motorcycles registered |
|------|------------------------|
| 2005 | 28,000 |
| 2006 | 30,000 |
| 2007 | 33,000 |
| 2008 | 37,000 |
| 2009 | 40,000 |

Figure 5 illustrates the rapid increase of motorcycle registrations in the last decade.

Figure 5 – Number of registered motorcyclist road deaths and registrations (thousands) in South Australia, 1999-2008

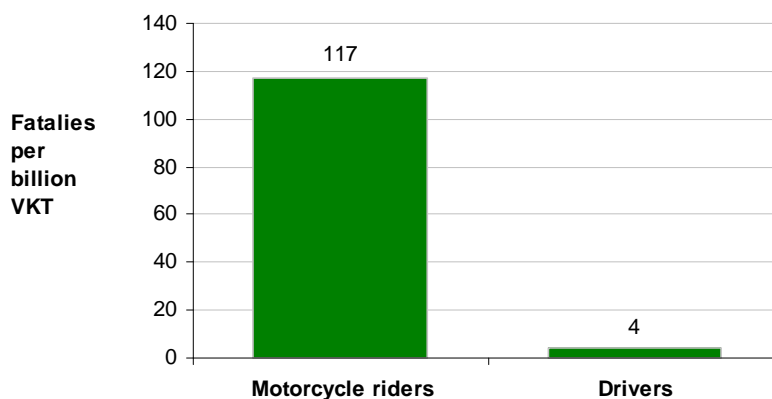


Risks for motorcycle riders

Motorcycle riders experience a higher risk of death and serious injury compared to other road users. Australian research has shown there is a significant difference in risk between motorcycle riders and other vehicle operators.

Figure 6 shows that for every 1 billion kilometres travelled by motorcycle riders, there were 117 motorcycle rider fatalities. This is almost 30 times the number recorded by operators of other vehicle types, who recorded fewer than 4 fatalities per 1 billion vehicle kilometres travelled (VKT).

Figure 6 – Australian fatality rates per billion VKT, motorcycle riders and drivers of other vehicles, 2007



Motorcycle riders - Common Crash Features

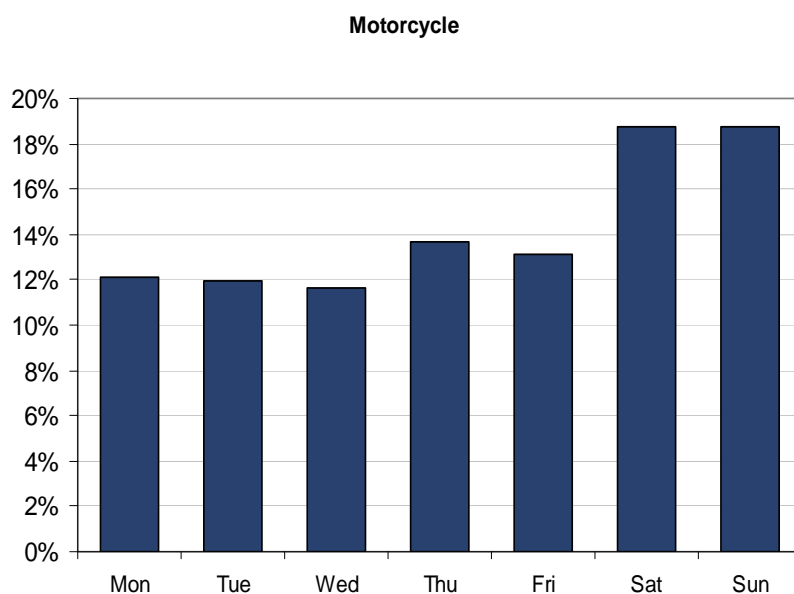
(Please note the following excludes pillion passengers.)

On average over the 5-year period, 2005-2009 there were approximately 176 motorcycle riders killed or seriously injured per year. Of these:

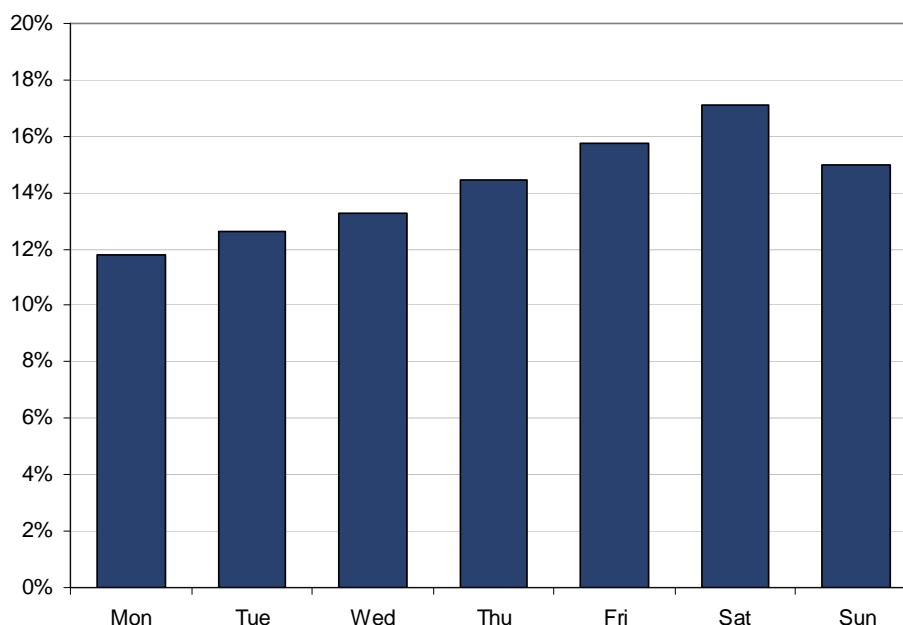
- 94% were male
- 55% occurred in metropolitan Adelaide
- 51% were 'motorcycle only' crashes that is they did not involve another vehicle
- 44% were as a result of hitting a fixed object or roll over
- 38% of serious casualties occurred on a Saturday or Sunday
- 28% of motorcycle fatalities tested positive to cannabis or ecstasy or methamphetamines, or a combination of these
- 27% of crashes were a result of right turn or right angle
- 25% of motorcycle fatalities had a blood alcohol reading of 0.05 or greater
- 24% occurred on roads sign posted at 100 or 110km/h
- 6% were not wearing a helmet at the time of the crash

Figure 7 shows that fatal and serious injury motorcycle crashes are more clustered into the weekend period than crashes involving the death of a car occupant.

Figure 7 – Crashes involving fatalities and serious injuries by Day of the Week for Motorcyclists and vehicle occupants, 2005-2009



All Vehicles



Motorcyclists are commonly involved in both single and multiple vehicle crashes. Table 8 shows the number of crashes for each year from 2005 to 2009 and the five year average.

Table 8: Motorcycle rider serious casualties from single or multiple vehicle crashes, South Australia, 2005-2009

| | Single | Multiple | Total |
|-----------------------|--------|----------|-------|
| 2005 | 68 | 84 | 152 |
| 2006 | 84 | 119 | 203 |
| 2007 | 76 | 92 | 168 |
| 2008 | 97 | 107 | 204 |
| 2009 | 77 | 84 | 161 |
| 5 Year Average | 45% | 55% | 100% |

Licensing status

A significant proportion of riders involved in fatal crashes do not hold an appropriate licence. Nearly a third of riders were not licensed for riding a motorcycle – they were either unlicensed or disqualified (10%), did not hold an appropriate licence (12%) or had never held a licence (9%). Table 9 presents the licence status for riders involved in fatal crashes during the 5 year period 2005-2009.

Table 9: Licence type – motorcycle operators involved in fatal crashes, 2005-2009

| Licence Type | Riders involved in fatal crashes | % |
|--|----------------------------------|------|
| Licensed | | |
| Learner | 4 | 5% |
| Provisional | 0 | 0% |
| Full | 47 | 57% |
| Probationary | 3 | 4% |
| Unlicensed | | |
| Unlicensed or Disqualified motorbike licence | 14 | 17% |
| Not appropriate licence | 8 | 10% |
| Never held a licence | 6 | 7% |
| Total (Known) | 82 | 100% |

Male and Female Riders

The overwhelming majority of motorcycle rider casualties are male. Males comprise 94% of rider casualties compared to 63% of car driver casualties in South Australia.

The proportion of women among car driver casualties has been increasing over recent years, although there has been no change in their involvement as motorcycle casualties.

Pillion Passengers

On average, 12 pillion passengers were killed or seriously injured per year for the five year period, 2005-2009. The numbers of killed or injured riders carrying pillion passengers were consistent across all ages, not necessarily among just young riders.

Currently, learner riders are not permitted to carry a pillion passenger unless the passenger holds a current full motorcycle licence (this excludes passengers who hold a provisional licence). However provisional and full licence riders are allowed to carry passengers.

Rider Age

In 2009, there were 31 serious casualties (or 20%) aged 16 to 24 years, 74 serious casualties (or 47%) aged 25 to 44 years and 53 serious casualties (or 34%) aged 45 years and over.

Figure 10 shows that serious casualties among riders with respect to their age group over time. The overall numbers of serious casualties has risen from the 1995-99 five year average of 161 to the current five year (2005-2009) average of 177 serious casualties. The 25-44 year age group has remained most represented, not surprisingly given the large span of ages. The proportion of numbers in the outer age groups have transformed, the 16-24 year age group has decreased

from representing 34% of all serious casualties between 1995-99 to now representing 23% for the five year period 2005-09. Conversely the over 45 age group has risen from representing 13% of all serious casualties in the 1995-99 to over double at 29% for the 2005-2009 period. This is likely to be a result of both an increase in the general population of people aged 45 years and above, and an increase in the usage of motorcycle in this age group.

Figure 10: Motorcycle rider serious casualties by age, South Australia, 1995-2009

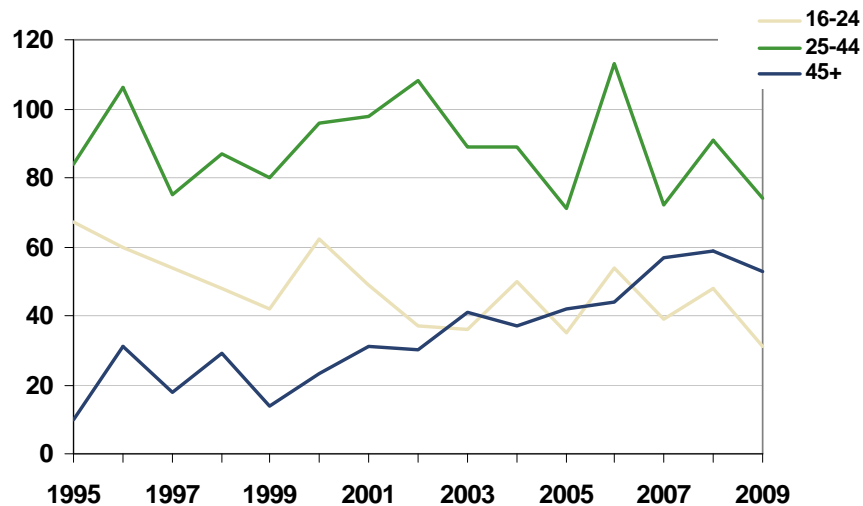
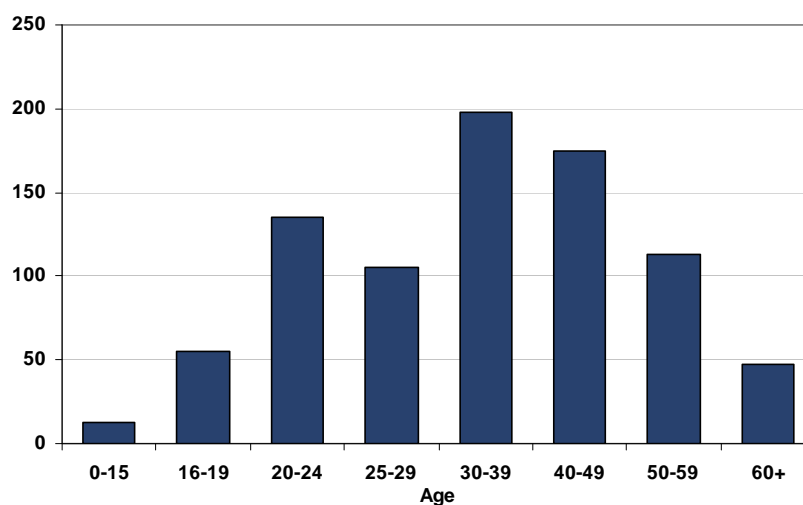


Figure 11 shows the percentage of fatalities and serious injuries across all age groups for the same period.

Figure 11 - Percentage of motorcycle rider serious casualties by age group, South Australia, 2005-2009



Scooters

A scooter is a motorcycle with step-through architecture and either a platform for the operator's feet or footrests integral with the bodywork.

Nationally the Federal Chamber of Automotive Industries (FCAI) reports that scooter sales have increased greatly in the 5 year period 2004-2008. In the three years leading up to and including 2006 the sale of scooters tripled. In 2006 sales had increased by 43% compared to 2005. Although sales remained stable in 2007, 2008 was a record year with over 15,000 scooters sold in Australia, an increase of 7.6%. 2009 however saw a 32% decrease in scooter sales. The FCAI reports that factors affecting this increase in sales include the increasing cost of petrol.

If South Australia has followed the national trend, there is likely to have also been an increase in the number of scooters in the State over the past 5 years. Table 6 shows that fatalities and serious injuries in South Australia have also increased in line with increased use of scooters.

Table 12 – Scooter rider serious casualties, South Australia, 2005-2009

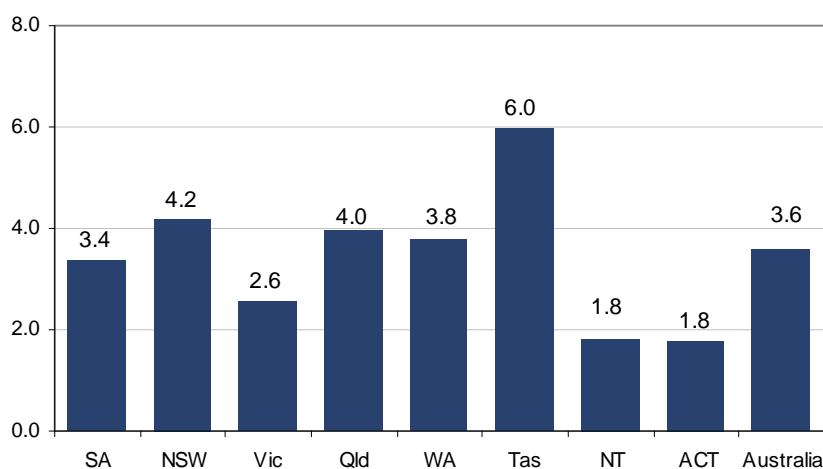
| | Fatalities | Serious Injuries | Total |
|-------------|------------|------------------|-------|
| 2005 | 1 | 8 | 9 |
| 2006 | 1 | 20 | 21 |
| 2007 | 0 | 20 | 21 |
| 2008 | 0 | 16 | 16 |
| 2009 | 0 | 13 | 13 |

SA comparison to other States and Territories

In 2009, motorcycle riders and pillion passengers accounted for 13% of all road fatalities in South Australia, compared with the previous five-year average of 14%.

This compares with other states such as Victoria 13%, NSW 15%, Queensland 18% and Western Australia 17% in 2009. Figure 7 shows the fatality rate per 10,000 registered motorcycles for each State and Territory.

Figure 7 – Motorcycle fatality rate per 10,000 registered vehicles, 2009



South Australia's rider fatality rate is slightly lower than the Australian rate.

Definitions of police reported casualty types:

Casualty Crash - A crash where at least one fatality, serious injury or minor injury occurs.

Casualty – A fatality, serious injury or minor injury.

Fatal Crash - A crash for which there is at least one fatality.

Fatality - A person who dies within 30 days of a crash as a result of injuries sustained in that crash.

Serious Injury Crash - A non-fatal crash in which at least one person is seriously injured.

Serious Injury - A person who sustains injuries and is admitted to hospital as a result of a road crash and who does not die as a result of those injuries within 30 days of the crash.

Minor Injury Crash - A crash for at least one person sustains injury but no person is admitted to hospital or dies within 30 days of the crash.

Minor Injury – A person who sustains injuries requiring medical treatment, either by a doctor or in a hospital, as a result of a road crash and who does not die as a result of those injuries with 30 days of the crash.

Property Damage Only Crash – A crash resulting in property damage in excess of the prescribed amount in which no person is injured or dies within 30 days of the crash.

Data sources

The data presented in this reports was obtained from the Department for Transport, Energy and Infrastructure Road Crash Database and the FAIC. The information was compiled from police reported road casualty crashes only

Figures relating to the current year are provisional and are subject to revision.

Enquiries

For further information about data in this report, contact:
Safety Policy, Department for Transport, Energy and Infrastructure
GPO Box 1533
Adelaide SA 5001
Email: dtei.enquiries@sa.gov.au
Internet : www.dtei.sa.gov.au/roadsafety