Motorcycles and Road Crashes in South Australia

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 1999-2008.

Table 1: Motorcycle and pillion passenger fatalities and serious injuries, South Australia, 1999-2008¹

Year	Fatalities	Serious Injuries
1999	15	137
2000	16	170
2001	14	169
2002	21	160
2003	13	163
2004	20	166
2005	20	136
2006	23	195
2007	8	172
2008	17	184

Figure 1 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 9% in 1999 of all serious casualties to 15% in 2008.

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

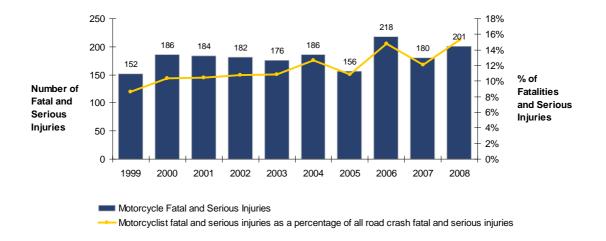


Figure 1 – Annual motorcycle and pillion passenger fatalities and serious injuries as a percentage of all road crash fatal and serious injuries, 1999-2008

Table 1 below further shows the overrepresentation of motorcyclists accounting for 2% of all registered vehicles but 14% of all fatalities.

Table 1 – Motorcycle registrations and fatalities– compared with other vehicle registrations and fatalities, 2004-2008

	Registered motorcycles as a percentage of all registered vehicles	Motorcyclist fatalities as a percentage of all road fatalities
2004	1.9%	14.4%
2005	2.0%	13.6%
2006	2.1%	19.7%
2007	2.2%	6.4%
2008	2.5%	17.2%
Five year average	2.1%	14.2%

Is motorcycling increasing?

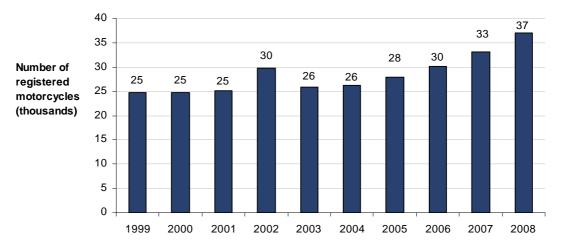
Table 2 shows that the number of registered motorcycles in South Australia has increased by 42% from 26,000 in 2004, to 37,000 in 2008.

Table 2: Number of motorcycles registered, South Australia, 2004-2008

Year	Motorcycles registered
2004	26,000
2005	28,000
2006	30,000
2007	33,000
2008	37,000

Figure 2 illustrates the rapid increase of motorcycle registrations in the last decade.

Figure 2 – Number of registered motorcyclist road deaths and registrations (thousands) in South Australia, 1999-2008



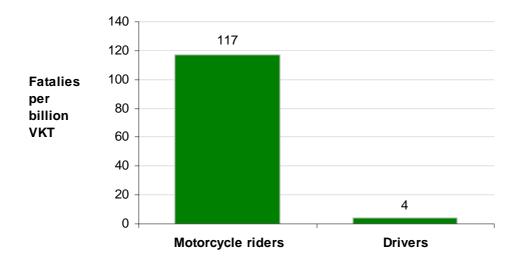
Risks for motorcycle riders

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 3 shows that for every 1 billion kilometres travelled by motorcycle riders, there were 120 motorcycle rider fatalities. This is about 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 3 – Australian fatality rates per billion VKT, motorcycle riders and drivers of other vehicles, 2007



Motorcycle riders - Common Crash Features

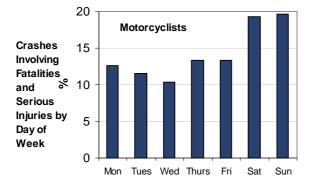
(Please note the following excludes pillion passengers.)

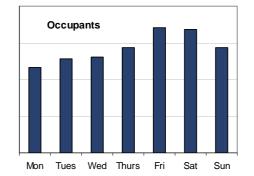
On average over the 5-year period, 2004-2008 there were approximately 188 motorcycle riders killed or seriously injured per year. Of these:

- 91% were male
- 49% of serious casualties occurred in metropolitan Adelaide
- 45% of serious crashes were 'motorcycle only' crashes that did not involve another vehicle
- 42% were as a result of hitting a fixed object or roll over
- 39% of serious casualties occurred on a Saturday or Sunday
- 32% of motorcycle fatalities tested positive to cannabis or ecstasy or methamphetamines, or a combination of these.
- 28% 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
- 25% occurred on roads sign posted at 100 or 110km/h
- 6% were not wearing a helmet at the time of the crash

Figure 4 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 4 – Crashes involving fatalities and serious injuries by Day of the Week for Motorcyclists and vehicle occupants, 2004-2008





Motorcyclists are commonly involved in both single and multiple vehicle crashes. Table 3 shows the number of crashes for each year from 2004 to 2008 and the five year average.

Table 3: Motorcycle rider serious casualties from single vehicle and multiple v	/ehicle
crashes, South Australia, 2004-2008	

	Single	Multiple	Total
2004	86	97	183
2005	68	84	152
2006	84	119	203
2007	76	92	168
2008	97	107	204
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 4 presents the licence status for riders involved in fatal crashes during the 5 year period 2004-2008.

Table 4: Licence type – motorcycle operators involved in fatal crashes, 2004-2008

Licence Type	Riders involved in fatal crashes	%
Licensed		
Learner	5	5%
Provisional	2	2%
Full	53	58%
Probationary	2	2%
Other appropriate licence	1	1%
Unlicensed		
Unlicensed or Disqualified motorbike licence	9	10%
Not appropriate licence	11	12%
Never held a licence	8	9%
Total (Known)	91	100%

Male and Female Riders

The overwhelming majority of motorcycle rider casualties are male. Males comprise 91% of rider casualties compared to 64% 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, 2004-2008. 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 2008, there were 48 serious casualties (or 24%) aged 16 to 24 years, 91 serious casualties (or 46%) aged 25 to 44 years and 59 serious casualties (or 30%) aged 45 years and over.

There are an increasing number of fatalities and serious injuries among motorcycle riders aged 45 years and above. Older riders are beginning to make up a significant proportion of motorcycle casualties. 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.

Table 5 shows the number of motorcycle serious casualties by age. There has been a rise in the number of casualties for each age group in the last decade, although the increase has been greatest for the 45+ age group.

	16-24	25-44	45+	Total
1999	42	80	14	136
2000	62	96	23	181
2001	49	98	31	178
2002	37	108	30	175
2003	36	89	41	166
2004	50	89	37	176
2005	35	71	42	148
2006	54	113	44	211
2007	39	72	57	168
2008	48	91	59	198

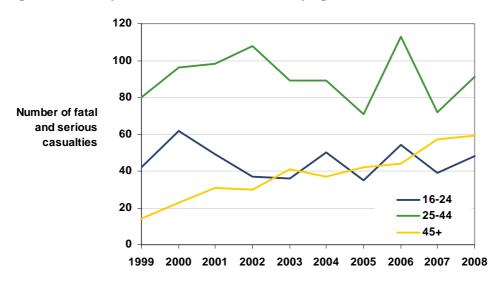
Table 5: Motorcycle rider serious casualties by age, South Australia, 1999-2008

Figure 5 shows that serious casualties among riders 16 to 24 years rose slightly from an average of 45 in 1999-2003 to 2008.

Serious casualties among riders 25 to 44 years reduced slightly over the same period, from an average of 94 in 1999-2003, to 81 in 2008.

Older riders aged 45 years or above experienced the largest increase over the decade. Serious casualties, in this age group nearly doubled, from an average of 24 in 1999-2003 to 59 in 2008.

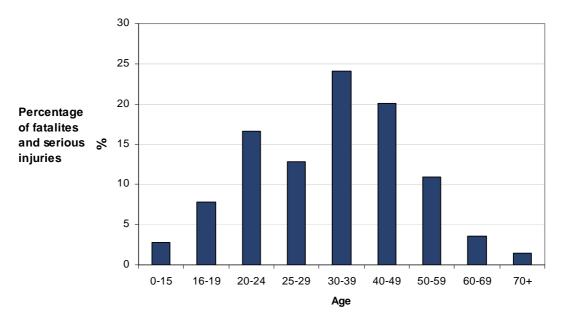




Older motorcyclists in particular are involved in an increasing number of fatal crashes. In 1999, older rider fatalities aged 45 or more comprised 10% of all motorcycle rider fatalities, while in 2008 this had risen to 30%.

Figure 6 shows the percentage of fatalities and serious injuries across all age groups for the same period.

Figure 6 - Percentage of motorcycle rider serious casualties by age group, South Australia, 2004-2008



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%. 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. Table 6 shows that fatalities and serious injuries in South Australia have also increased in line with increased use of scooters.

Table 6 – Scooter rider serious casualties, South Australia, 2004-2008

	Fatalities	Serious Injuries	Total
2004	0	6	6
2005	1	8	9
2006	1	20	21
2007	0	20	21
2008	0	16	16

SA comparison to other States and Territories

In 2008, motorcycle riders and pillion passengers accounted for 17% of all road fatalities in South Australia, compared with the previous five-year average of 12%.

This compares with other states such as Victoria 14%, NSW 14%, Queensland 22% and Western Australia 17% in 2008. 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, 2008

South Australia's rider fatality rate is currently the same as the Australian rate.

Definitions of police reported casualty types:

Fatality - A person who dies within 30 days of a crash as a result of injuries sustained in that crash. *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* – 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 a road crash and who does not die as a result of a road crash and who does not die as a result of those 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.

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 PO Box 1 Walkerville SA 5081 Email: <u>dtei.enquiries@sa.gov.au</u> Internet : www.dtei.sa.gov.au/roadsafety