

## YOUNG PEOPLE INVOLVED IN ROAD CRASHES IN SOUTH AUSTRALIA

Despite steady falls in South Australia's road toll over the past decade, young drivers continue to be over-represented in road trauma statistics.

People aged 16 to 24 years make up 12% of the population, but account for 22% of all fatalities and 24% of all serious injuries in South Australia for the years 2009-2013.

People aged 16 to 19 make up 5% of the population, but account for 10% of all fatalities and 10% of all serious injuries in South Australia. Also, young drivers have a significantly higher risk of death relative to the number of kilometres they drive, compared to other driver age groups.



People aged 20 to 24 make up 7% of the population but during the 5 year period between 2009 – 2013 accounted for 12% of all fatalities and 13% of all serious injuries in South Australia.

Seventy two per cent of young driver/rider fatalities aged 16 to 24 are male and 86% are responsible for the fatal crash they are involved in.

Research shows that the human brain's final stages of development, particularly for males, continue well into a person's early 20s, and often conclude around age 25. The prefrontal cortex, which governs reasoning, advanced thought and impulse control, is the final area of the human brain to mature, but is a critical element in safe driving.

Figure 1 illustrates that young drivers are involved in more casualty crashes than any other driver age group.

**FIGURE 1: Average number of drivers/riders involved in casualty crashes by age, 2009-2013**

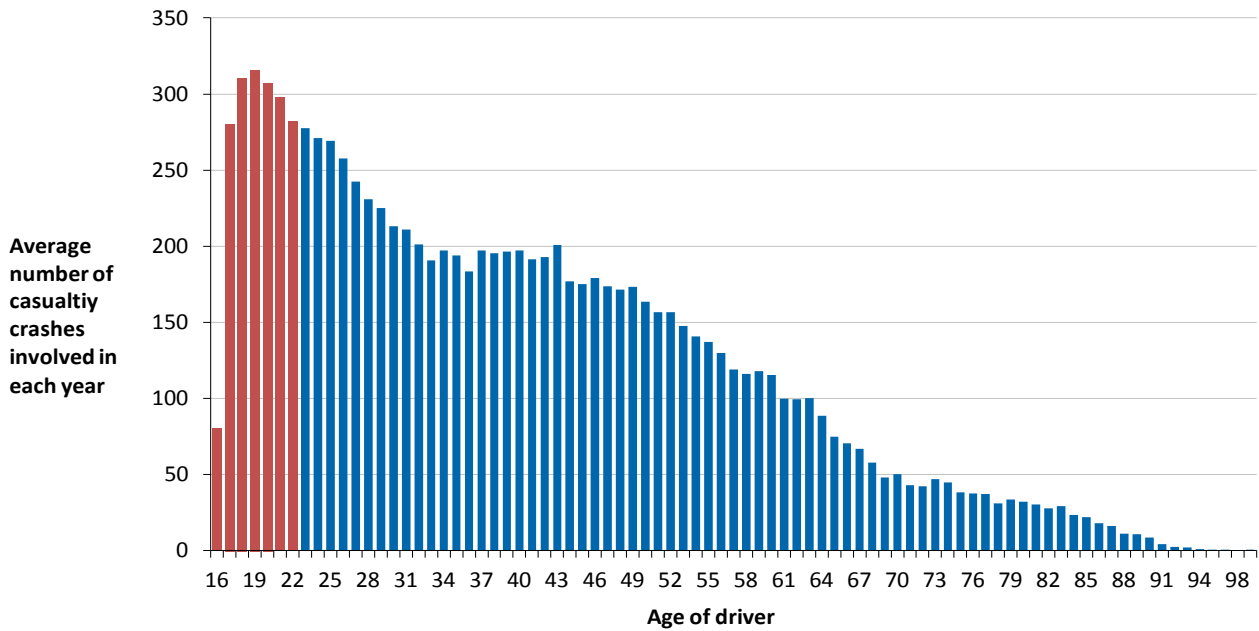
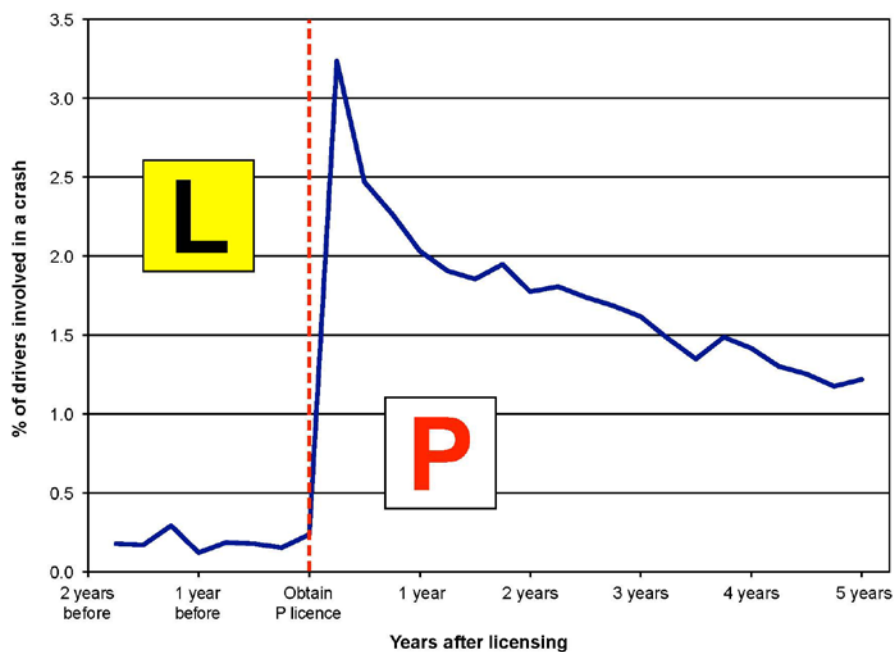


Figure 2 shows that young drivers in South Australia are more likely to crash in the first 12 months of holding a Provisional licence, upon gaining a P licence and beginning to drive unsupervised, the percentage of young drivers involved in crashes rises around eleven times. For the time that a driver holds a Learners' permit the risk of crash is relatively low.

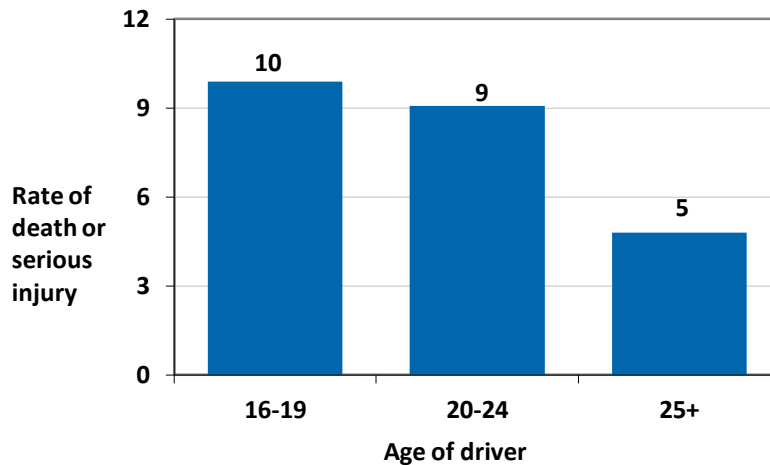
**Figure 2: Percentage of SA drivers involved in a crash five years after licensing<sup>1</sup>**



<sup>1</sup> The crash and offence experience of newly licensed young drivers in South Australia, Austroads, 2008

Figure 3 below illustrates that young drivers aged 16 to 19 have a rate of 10 deaths or serious injuries for every 10,000 drivers licensed. This is twice the rate of older drivers aged 25 and above who have a rate of five fatalities or serious injuries per 10,000 licences held. Figure 2 also shows that drivers aged 20 to 24 years have a rate of 9 deaths or serious injuries for every 10,000 licences held, almost twice that of drivers aged 25 and over.

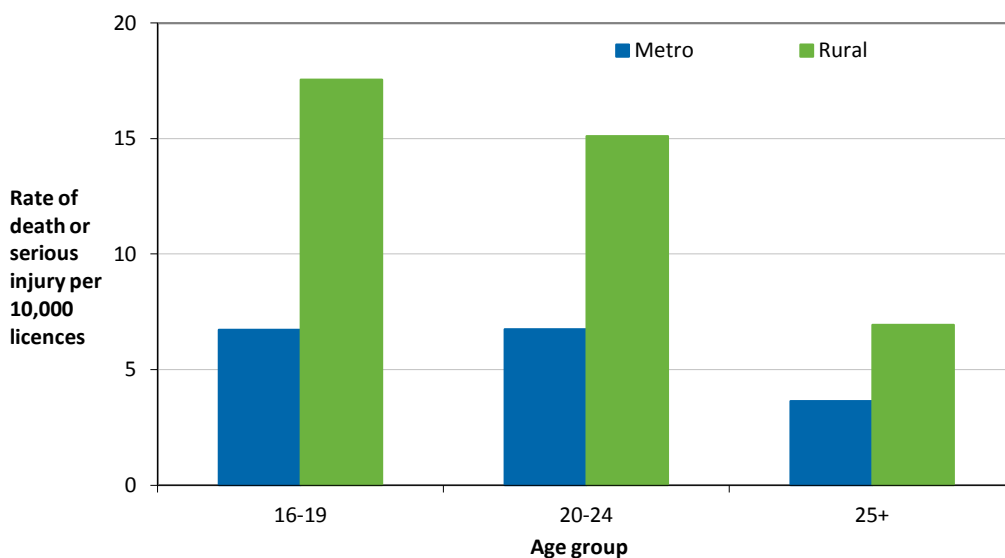
**FIGURE 3: Rate of death or serious injury per 10,000 licences for drivers/riders by age, 2009-2013**



**Rural and urban fatal and serious casualty rates by age group**

Comparisons between urban and rural residents show that rural driver and rider casualties in all age groups have higher fatality involvement rates per head of population. Young drivers and riders aged 16 – 24 in rural South Australia are around 2 ½ times more likely to or be seriously injured in a crash than those who live in the metro area.

**Figure 4 – Rate of death or serious injury per 10,000 licences held for drivers/riders by residence 2009-2013**



**Table 1 - 16-19 year old fatalities per 100,000 population for 2009-2013 by jurisdiction<sup>2</sup>**

State	16-19 yr old fatalities (2009-13 Avg)	Population	Fatality Rate
ACT	1	19,417	4.1
Vic	25	288,533	8.7
NSW	35	374,311	9.4
Qld	29	247,630	11.6
WA	15	128,675	12.0
<b>SA</b>	<b>11</b>	<b>84,399</b>	<b>12.8</b>
Tas	4	27,116	14.8
NT	2	13,038	18.4
<b>Aust</b>	<b>122</b>	<b>1,183,119</b>	<b>10.3</b>

South Australia has the third-worst fatality rate for the 16 to 19-year-old age group compared to other Australian states and territories.

Research has shown that younger drivers, particularly males, exhibit certain attributes that contribute to their higher risk of road crashes. These include:

- A greater inclination for risk taking
- The use of older vehicles with fewer safety features
- A greater susceptibility to inappropriate peer pressure and other driver distractions such as mobile phone use
- Driving too fast for the road conditions
- Running red lights
- Not allowing appropriate space between vehicles.

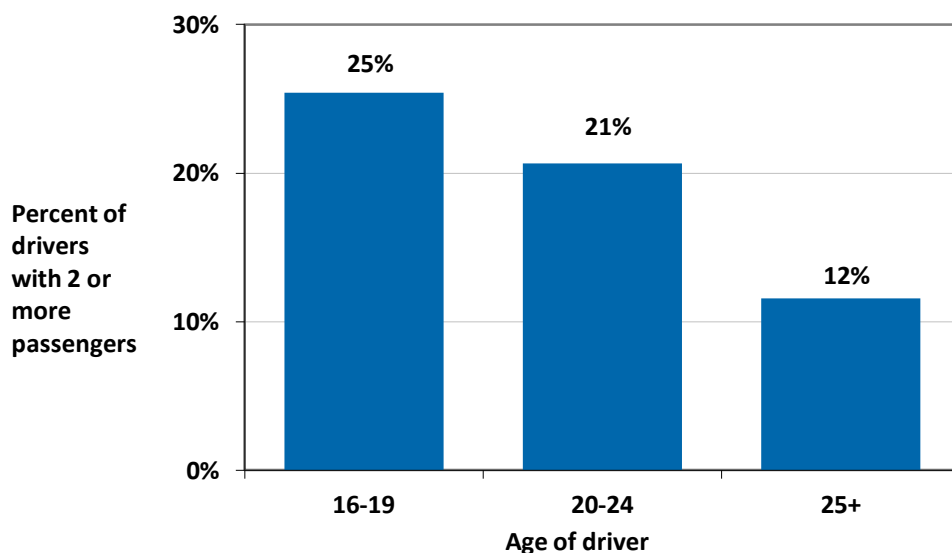
In keeping with best practice internationally and interstate, South Australia manages these risks through a Graduated Licensing Scheme (GLS) that supports drivers in gaining appropriate experience at an appropriate age.

### Crashes and passengers

Research shows the risk of young drivers crashing increases when carrying two or more passengers in the vehicle. In South Australia, 25% of drivers aged 16 to 19 involved in fatal crashes from 2009 to 2013 were driving with two or more passengers – see Figure 5. By contrast, 21% of drivers aged 20 to 24 and 12% of drivers aged 25 and over involved in fatal crashes were carrying two or more passengers.

<sup>2</sup> Fatality data sourced from the Australian Road Deaths Database, population as of June 2013, ABS, cat 3101.0

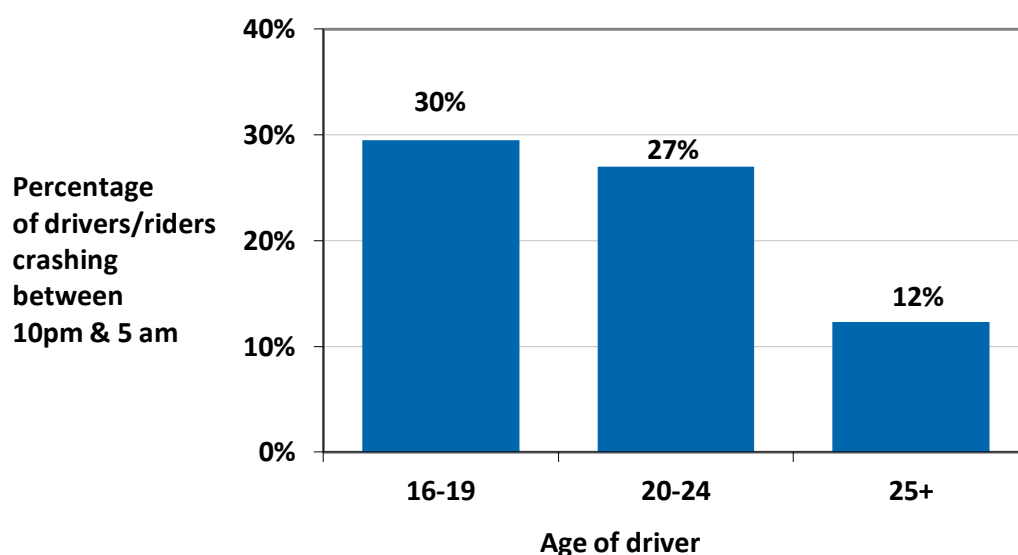
**FIGURE 5: Percentage of drivers involved in fatal crashes with 2 or more passengers in the vehicle, 2009-2013**



### Time of crash

Numerous studies have shown an increased risk for young drivers driving late at night. The involvement of South Australian young drivers in late night and early morning fatal crashes is higher than for older drivers – see Figure 6. Of the younger drivers aged 16 to 19 involved in fatal crashes from 2009 to 2013, 30% had crashes between 10pm and 5am, compared to 27% of drivers aged 20 to 24 and 12% for drivers aged 25 years and over.

**FIGURE 6: Percentage of drivers involved in fatal crashes between 10pm and 5am, 2009-2013**



### Five year trend, 2009-2013

On average over the 5 year period, 2009-2013 for drivers/riders in the 16 to 24 year age group:

- 30% of drivers/riders killed and tested for blood alcohol content (BAC) recorded a BAC of .05 or above.
- 55% of drivers/riders were killed or seriously injured on rural roads.
- 34% of the drivers and passengers killed were unrestrained.
- 49% of drivers/riders were killed or seriously injured on a Friday, Saturday or Sunday.
- 56% of drivers/riders were killed or seriously injured occur on roads signposted as 80km/h or above.
- 66% drivers/riders killed or seriously injured were male.

### **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 of Planning, Transport and Infrastructure Road Crash Database. The information was compiled from police reported road casualty crashes only.

### **Enquiries**

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