Speed related trauma trends
Report
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1 Trends for speed related fatal and serious injury crashes since 2008

The following overview of speed (excessive or inappropriate) involvement in NSW road trauma is limited to the most recent available data. For fatal crashes this covers the calendar years 2008 to 2016, where the 2016 data are preliminary and subject to change. For serious injury crashes this covers the calendar years 2008 to 2015 – data for the calendar year 2016 data were incomplete at the time of this report and therefore not included. Only the matched serious injury data were used in the analysis as complete data for non-matched serious injuries (along with other crash characteristics) were not available.

A speed related crash is a crash involving at least one speeding motor vehicle.

A vehicle controller is considered to be speeding if:

- The controller (driver or rider) was charged with a speeding offence or the vehicle was described by police as travelling at excessive speed or the stated speed of the vehicle was in excess of that permitted for the vehicle controller’s license class or the vehicle weight (introduced 1 January 2010) or the stated speed of the vehicle was in excess of the speed limit.

Or

- The vehicle was performing a manoeuvre characteristic of excessive speed, that is: while on a curve the vehicle jack-knifed, skidded, slid or the controller lost control or the vehicle ran off the road while negotiating a bend or turning a corner and the controller was not distracted by something or disadvantaged by drowsiness or sudden illness and was not swerving to avoid another vehicle, animal or object and the vehicle did not suffer equipment failure.

1.1 Trend analysis – crash data

From 2008 to 2016 there were a total of 1,268 fatal crashes involving speed, resulting in 1,388 fatalities with speed accounting for at least 42 per cent of all fatalities over this period.

From 2008 to 2015 there were a total of 11,970 serious injuries from speed related crashes, representing at least 23 per cent of all serious injuries over this period.
1.1.1 Speed related fatalities and serious injuries since 2008

Speed related fatalities decreased between 2009 and 2014 but have increased in recent years. In contrast speed related serious injuries have generally increased since 2008 but decreased in 2015. Compared with the 2008 to 2010 baseline average speed related fatalities in 2016 were down by 9 per cent. In contrast, speed related serious injuries in 2015 were 4 per cent above the 2008 to 2010 baseline average. Consequently, the percentage of total serious road trauma which involves speed has been relatively unchanged since 2008.

1.1.2 Speed related fatalities and serious injuries since 2008

Speed related fatalities decreased between 2009 and 2014 but have increased in recent years. In contrast speed related serious injuries have generally increased since 2008 but decreased in 2015. Compared with the 2008 to 2010 baseline average speed related fatalities in 2016 were down by 9 per cent. In contrast, speed related serious injuries in 2015 were 4 per cent above the 2008 to 2010 baseline average. Consequently, the percentage of total serious road trauma which involves speed has been relatively unchanged since 2008.
The overwhelming majority of speeding drivers involved in fatal crashes for 2008 to 2016 are males (84 per cent) with males aged under 50 years accounting for 75 per cent of all speeding drivers involved in fatal crashes.

Similarly a significant majority of speeding drivers involved in serious injury crashes for 2008 to 2015 are males (74 per cent) with males aged under 50 years accounting for 57 per cent of all speeding drivers involved in serious injury crashes.

1.1.3 Speeding drivers and riders involved in fatal crashes 2008 to 2010 x 2014 to 2016, gender x age group

The following chart showing the demographic distribution of speeding drivers involved in fatal crashes shows improvements for most demographic groups, particularly for males aged under 40 years. However, there have been increases amongst males aged 60 to 69 years.

1.1.4 Speeding drivers and riders involved in serious injury crashes, 2008 to 2010 v 2014 to 2015, gender x age group

For speeding drivers involved in serious injury crashes the largest increases have been amongst males aged 50 to 69 years and females aged 26 to 39 years.
1.1.5 Speed related fatal crashes since 2008, urbanisation

The majority of fatal crashes involving speed occur in the country areas of NSW (that is, outside the Sydney Newcastle and Wollongong Greater Conurbation). From 2009 to 2014 there was a strong decreasing trend in the country areas until 2015 and 2016. In contrast, the trend for speed related fatal crashes in the Sydney Newcastle and Wollongong Greater Conurbation has been unchanged since 2010.
1.1.6  Speed related serious injury crashes since 2008, urbanisation

Speed related serious injury crashes are more evenly split between the Sydney Newcastle and Wollongong Greater Conurbation and the rest of the State. There had been an increasing trend for speed related serious injury crashes in the SNW Conurbation until 2014.

![Speed Related Serious Injury Crashes Since 2008, Urbanisation](image)

1.1.7  Speed related fatal crashes since 2008, road classification

The largest percentages of speed related fatal crashes and serious injury crashes occur on unclassified (local) roads and lower order classified roads. Unclassified roads saw an increase in speed related fatal crashes in 2016.

![Speed Related Fatal Crashes Since 2008, Road Classification](image)
1.1.8 Speeding drivers and riders involved in fatal crashes since 2008, type of vehicle

There were decreasing involvements of speeding car / car derivative drivers involved in fatal crashes from 2009 to 2015 but there was an increase in 2016. Of note has been the increasing trend for speeding light truck drivers involved in serious injury crashes, increasing by 48 per cent from 2000 to 2015.
1.1.9 Percentage of drivers and riders involved in fatal crashes, 2012 to 2016, speeding v not speeding, selected factors

A comparison of the prevalence of behaviour factors for speeding drivers involved in fatal crashes with that for non-speeding drivers involved in fatal crashes strongly suggests that speeding behaviour is associated with elevated levels for other selected behaviour factors.

For example, around one quarter of all speed involvements in fatal crashes (24 per cent) involved illegal alcohol whilst only 5 per cent of all non-speeding driver involvements in fatal crashes involved illegal alcohol. Restraint non usage and unauthorised driving are also strongly over-represented amongst speed involvements in fatal crashes. There was also a slightly elevated level of crashing in the same local government area of residence for speeding drivers involved in fatal crashes.
Similar findings were found for speeding drivers involved in serious injury crashes when compared with those drivers / riders not considered to be speeding in serious injury crashes. Illegal alcohol, fatigue, safety device non usage and unauthorised driving were all over-represented for speeding drivers involved in serious injury crashes when compared with those drivers not considered to be speeding.

Note that these results do not take into account the differing demographic profile of speeding motor vehicle controllers involved in fatal crashes. Standardising the results by age and gender only slightly reduces the strength of the over-representation of these risk taking behaviours for speeding drivers involved in fatal and serious injury crashes.
The incidence of speed related fatal and serious injury crashes increases on Friday and across the weekend. Almost 40 per cent of all speed related fatal and serious injury crashes occurred on the weekend.

1.1.10 Percentage of speed related fatal and serious injury crashes since 2012, hour of day

The incidence of speed related fatal and serious injury crashes is highest between 10 am and 6 pm whilst speed related fatal crashes appear to be over-represented during the late evening / early morning hours (10 pm to 2 am).