Deaths of children in NSW: 10-year review of child passenger deaths and seatbelt use

Road crashes are one of the main causes of injury-related deaths of children in NSW. In 2017, we commissioned a review of the role of seatbelts and child restraints in the deaths of child passengers in vehicle crashes. The review was conducted by Neuroscience Australia (Dr Julie Brown), and examined the deaths of 66 children aged 0-12 years who died as passengers in NSW during the ten-year period, 2007-16.

The review considered whether or not the children were restrained, and if they were, whether they were properly restrained – that is, using an age appropriate and correctly fitted restraint.

Seatbelts and child restraints save lives

The review found that almost one-third (20) of the deaths of children may have been prevented if the child had been properly restrained in the vehicle. While in some cases, the severity of the crash meant that correct restraint use would not have prevented death, a concerning finding was that over a half (35 of the 66 children) were not properly restrained in the vehicle:

• 15 children were unrestrained in the vehicle.
• For 14 children, age appropriate restraints including seatbelts were used, but the restraints were not used correctly – for example, seat belts were placed under the arm, children were lying across the seat with a seat belt on, or tethers were not anchored correctly, not used, twisted or loose.
• Six children aged between two and six years were using the wrong restraint type for their age; most wore seat belts when carers should have used a dedicated child restraint system.

Australian legislation requires the use of child restraint systems by children up to the age of seven. Numerous studies consistently report the effectiveness of restraint systems in reducing risk of death and injury among children in crashes compared to unrestrained children.

Social and demographic characteristics

The review found that the likelihood of death as a passenger was greater for Aboriginal and Torres Strait Islander children, children whose families lived in the most disadvantaged areas of the state, and children living in remote areas.

• The mortality rate for passenger deaths for Aboriginal and Torres Strait Islander was 4.2 times as high compared with non-Indigenous children (2 versus 0.5 deaths per 100,000 children).
• Most children who died lived in the lowest socio-economic areas of NSW. The mortality rate was five times as high for children from the most disadvantaged areas compared to those from areas of least disadvantage.
• Most of the children – four of every five – died in crashes that occurred outside of major cities in NSW. Most children also died in crashes that occurred on high-speed roads with speed limits of 80km/hr or more.

Observations and recommendations

There is no doubt that the use of a restraint is an effective way to reduce the risk of injury in a crash. Recent studies have investigated barriers to carers ensuring their children are properly secured in age

This fact sheet contains key information from a report ‘The role of child restraints and seatbelt in passenger deaths of children aged 0-12 years in NSW’. The full report is available at: www.ombo.nsw.gov.au. The report also informs the Biennial Report of the deaths of children in New South Wales: 2016 and 2017. This is available on our website.
appropriate and correctly fitted restraints. In addition to socio-economic status, factors such as parental risk perception, awareness and education, child restraint design, parenting style, child preferences and comfort have been identified as important.

- On the basis of the review, we have recommended in the Biennial Report of the deaths of children in NSW: 2016 and 2017 that:
  - Transport for NSW should undertake a study of child restraint practices in NSW. The study should have a particular focus on areas of socio-economic disadvantage and those outside major cities.
  - NSW Health and Transport for NSW should use their data linkage system for regular surveillance and monitoring of crash injuries and fatalities of children under the age of 13.
  - Transport for NSW (Centre for Road Safety) should actively promote information on best practice for restraining children over the age of seven years. Promotion activities should particularly target culturally and linguistically diverse (CALD) communities, Aboriginal and Torres Strait Islander communities, and areas of low socio-economic status.
  - Transport for NSW should fund a comprehensive and ongoing program to increase the correct and age-appropriate use of motor vehicle child restraints in NSW. The program should draw on the learnings of the Buckle-Up Safely program and incorporate a range of settings. It should provide education about safe travel for children, access to appropriate restraints (including subsidies for low income families), and expert fitting of child restraints.