Lessons from in-depth crash investigation – accidents involving older drivers

The ageing of the Australian driving population will mean that in the years to come there will be a greater proportion of older drivers on our roads.

Older drivers are known for being more cautious and for exhibiting less illegal, dangerous driving behaviour. However, they are also suspected of being involved in crashes as a result of functional impairments that disrupt safe driving. CASR recently reviewed a sample of 298 metropolitan area crashes that were investigated in depth and at the scene, and which included crashes involving 62 drivers and two riders (one motorcyclist, one pedal cyclist) aged over 65. 36 of these 64 crashes occurred at intersections.

In 8 of the intersection crashes, the older drivers were travelling straight ahead at a sign-controlled four-way intersection, and in seven of these the driver failed to obey the Give Way or Stop Sign. Older drivers were also commonly turning at a signalised four-way intersection or at an unsigned T-junction. Issues identified include cognitive deficits (particularly a problem at non-signalised intersections), the inability to detect vehicles behind others at intersections, difficulty judging the speed of oncoming other vehicles.

The findings point to the importance of medical fitness to drive evaluations successfully identifying cognitive impairment. They also support the restriction of filter right turns (for example, more dedicated right turn phases at signalised intersections).

For more information please contact Matthew Baldock, matthew@casr.adelaide.edu.au

New publications

Best practice in road safety mass media campaigns: A literature review (CASR074)

Vehicle speeds in South Australia 2008 (CASR066)

Annual performance indicators of enforced driver behaviours in South Australia, 2008 (CASR079)

2010 CASR seminar series

The CASR seminar series will address major topics in the fight to reduce road trauma and highlight the latest research in the area.

1 September, Vehicle Crashworthiness, Associate Professor Robert Anderson

For a full list of 2010 seminars please see our website.

The seminars are held in The Art Gallery Auditorium from 4:00 - 5:30pm.

To confirm your attendance please contact Leonie Witter on (08) 8303 4114 or email leonie@casr.adelaide.edu.au.

At the scene

Intelligent speed assist – is it worth it?

A technology that has the potential to reduce this problem is intelligent speed assist (ISA). ISA devices can assist the driver to keep to the speed limit by issuing visual or auditory warnings. They can support the driver to keep to the speed limit by ‘hardening’ the accelerator pedal or cutting fuel supply to the engine or other methods. They can also limit drivers to driving at the speed limit by not allowing this control to be overridden.

Trials of ISA have shown it produces reductions in travel speed, although just how much of a difference it makes depends on the extent of the speeding problem in the trial area and the type of ISA used in the trial. The more restrictive ISA devices produced greater speed reductions. Some of these trials also show that ISA distorts the traditional normal distribution of vehicle speeds by encouraging, or forcing, drivers at speeds above the speed limit to slow to the speed limit.

CASR recently conducted research into the cost effectiveness of ISA in Australia. Several scenarios were considered including installing ISA on all vehicles, new vehicles, fleet vehicles, heavy vehicles, or in young drivers’ vehicles. A market driven approach was also considered, as was ISA functionality on navaid devices.

“Installing ISA on new vehicles proved to be the most cost effective option,” said Sam Doecke, “but consideration should also be given to installing ISA on young drivers’ cars as, unlike other safety technology such as electronic stability control, ISA is able to be retrofitted. Young drivers are over-represented in all crashes and crashes involving speeding are no different.”

“We also found that ISA that limits people to the speed limit is the most cost-effective option and the most effective at reducing injury crashes,” although he acknowledged that this might be hard to sell to motorists. “Devices that are popular, such as navaid devices that incorporate ISA functionality may be cost effective, but we know very little at this stage about how effective they are at reducing speeding compared to dedicated devices, and how much they are actually used.”

A paper on this study will be presented at the upcoming Road Safety Research, Policing and Education Conference in Canberra. The study was commissioned by the Department of Transport and Main Roads (QLD) and Co-sponsored by the Office of Road Safety - Department of Premier and Cabinet (WA), Transport Certification Australia and VicRoads.

For more information please contact Sam Doecke, sam@casr.adelaide.edu.au.
Youth expo teaches students about road safety

In March, Lisa Wundersitz and Daniel Searson from CASR attended the Youth Expo held at Cornerstone College in Mount Barker. Lisa and Daniel helped staff an exhibit organised by the Adelaide Hills Community Road Safety Group. Students visiting the exhibit were encouraged to fill out a questionnaire regarding various road safety issues. The questionnaire included a survey on road safety, as well as some factual questions based on information supplied by CASR on crash risk and stopping distances.

Road safety thinker brings his ideas to Adelaide

In May, Adelaide Thinker in Residence Professor Fred Wegman began his residency with a three-week visit to South Australia. Professor Wegman, Managing Director of the Institute for Road Safety Research (SWOV) in the Netherlands, is one of the world’s most respected road safety experts.

During his visit to Adelaide, Professor Wegman spent time meeting with transport and road safety groups and gave a well attended public lecture. He also visited CASR and spoke to staff, as well as guests from the Transport Systems Centre at the University of South Australia and the Research Centre for Injury Studies from Flinders University.

During his residency Professor Wegman will be contributing to the South Australian Road Safety Strategy 2011-2020. He will be returning to Adelaide in November.

New website for victims of road trauma

The Journey Beyond Road Trauma website is an online social network for people affected by road trauma. The website, created by Sandra Cooke and Kerry Sunderland was officially launched during Easter this year.

The website aims to create a safe, supportive space for those affected by road trauma, where people can find support, join online communities, tell their story via a blog or a digital story and create a memory space in honor of a loved one. Website members can also use the site as a starting point for road safety campaigning.

The website currently receives sponsorship from organisations including the RAA, who sponsored the production of a series of short documentaries based on real experiences that demonstrate the impact of road trauma.

For more information please visit the Journey Beyond Road Trauma website – www.journeybeyondroadtrauma.org

Vehicle speeds in South Australia

Between 2007 and 2008 speeds on South Australian roads went down by 0.7 kph. However, about a third of vehicles on South Australian roads are exceeding the speed limit.