

Older road users



- At June 2016, 14.7% of the Queensland population were senior adults (aged 65+)¹. It is estimated that by the year 2061, one in four Queenslanders will be aged 65 years or older².
- A consequence of this surge is a dramatic increase in the numbers of road crashes and fatalities among senior adults, especially pedestrians.

State of the Road A Fact Sheet of the Centre for Accident Research & Road Safety - Queensland (CARRS-Q)

THE FACTS

- All older road users, whether pedestrians, drivers, riders or passengers, share natural declines in functional capacities and increased fragility associated with ageing. This places them at increased risk during mobility. Although the risk of being involved in a crash is lower amongst senior adults in terms of rate per population, the risk of being killed when a crash occurs is much greater due to increased fragility.
- In 2015 in Australia, 269 fatalities were senior adults aged 65 years or older (22% of the national road toll). Ten years ago, they represented a lesser 16% of the national road toll. Of these, 118 fatalities involved adults aged 65-74, while 151 were adults aged 75 years or older³.
- Of the 269 senior adults aged 65 years or older killed on Australian roads in 2015³:
 - 132 were drivers;
 - 49 were passengers;
 - 68 were pedestrians;
 - 12 were motorcycle riders; and
 - 7 were cyclists.
- In 2014 in Queensland, 61 fatalities were adults aged 65 years or older (15% of the state road toll). Of those fatally injured, 20 were aged 65-74 years and 14 were aged 75 years or older (9% and 6% of the state road toll respectively)³.
- The nature of fault is different for older and younger road users. Crashes in which older drivers are considered to be most at fault tend to be the result of poor decision-making or a failure to detect and act on important information⁴.
- Assessment of which road users are most at fault in traffic crashes by age reveals a U-shaped curve, with young drivers typically having a high level of

fault which declines in the mature years before increasing again from age 60. The most significant increase occurs amongst those aged 75 years and older who are considered most at fault in 80% of crashes in which they are involved⁵.

Older road users are growing in number, seeking safe mobility and independence for as long as possible.

Older drivers are less likely than younger drivers to drink drive, speed or engage in other deliberate risk-taking behaviour.

Common causes of older driver crashes

- Failure to see and/or yield to other road users;
- Complex road environments (e.g. intersections, roundabouts);
- Sudden illness or blackout;
- Lack of awareness of traffic signals; and Low speed manoeuvres (e.g. U-turns)⁴.

In 2014, approximately 40% of road fatalities for senior adults aged 65 years or older were pedestrians³. Responsibility was fully or partially attributable to the pedestrian in about 85% of older pedestrian crashes⁶.

Why are older road users at higher risk?

- Driving a motor vehicle is a complex task involving factors such as perception, judgement and physical capability. A range of naturally occurring age-related conditions may impair these factors,

increasing the risk of being involved in a crash.

- Age-related conditions that may impair driving ability include:
 - Diminished hearing and eyesight;
 - Slower decision-making;
 - Slower reflexes and reduced agility; and
 - Reduced muscle strength and response.
- As we age, the potential need to take medications increases. Medications may affect reflexes and reaction times, cause drowsiness, affect eyesight and reduce muscle strength. Older drivers should seek information from their doctor regarding the potential impact of any medication they are taking on their driving safety, and particularly the potential interactions between different medications.
- Older drivers typically limit their risk by avoiding driving at night or in peak hours. They are more likely to take short urban trips in familiar areas, where their risk per kilometre travelled is similar to that of other drivers.
- "Grey nomads" (retirees taking road trips) form a growing subgroup of road users. Their greater mobility increases their exposure to risk, and reduces their ability to access emergency and health services as they are visiting remote areas.
- Most older drivers have not undertaken driving assessments since they obtained their licence or maintained their knowledge of the current road rules.
- Older road users have reported difficulties with:
 - Changes in road rules and technology;
 - Other drivers' attitudes (e.g., aggression);
 - Traversing roundabouts;
 - Judging distances and speeds;



- Fatigue (especially on long trips);
- Night driving and bright lights;
- Reversing and parking;
- Tailgating by other drivers; and
- Dealing with busy intersections.

Conditions for older drivers

In Queensland, drivers who are 75 years or older, as well as drivers with medical conditions that affect their ability to drive, are required to obtain a medical certificate from their doctor to continue driving. The certificate must be carried whenever driving, has an expiry date and may include conditions such as restrictions on night time driving or time/distance on a single trip. Health professionals may not be able to evaluate their ability to interact with the road and traffic environment. The doctor may suggest a driving assessment, however, self-assessment and self-regulation are encouraged.

CARRS-Q'S WORK IN THIS AREA

- Major report on older driver licensing in

support of the Queensland Government's Older Driver Safety Advisory Committee⁴.

- Research into older driver self-regulation.
- Investigation of situations that older drivers and pedestrians try to avoid.
- Identification of road environment and vehicle factors which contribute to trauma in older vehicle occupants.
- A literature review on ITS solutions for older drivers.
- Cognitive strategies adopted by older pedestrians when deciding when and where to cross the road.
- Exploration of the factors which may impact on older drivers' decisions to stay or stop driving, and the development of educational materials to aid this process.
- Put Yourself in the Picture - a resource for older drivers.
- The growing phenomenon of "Grey Nomads" and their risk of medical or road safety incidents in rural areas.
- Pedestrian travel: Getting Queenslanders walking safely.
- A cross-cultural investigation of the efficacy

of medication warning labels relating to driving.

FUTURE DIRECTIONS

- Monitor the effectiveness of policy changes made as a result of public consultation on the ODSAC report
- The development of ITS solutions.
- Further investigation of self-regulation strategies, and response of older drivers to feedback as part of the process.
- Investigation of the potential value of changing the road environment to meet the needs of older drivers.
- Further research is required into the physical limitations of older road users, their mobility needs and for broader scoping research into how these factors combine to affect the safety of all road users.
- A means to clearly identify road users who present an unacceptably high risk to themselves and other road users is required - via an objective, standardised physical or functional screening process.
- Alternative transport solutions are required to enable non-drivers to access services and maintain a healthy, involved lifestyle.

Getting older doesn't have to mean giving up the driving and riding. **Know your limitations, the affects of medications you take, take extra time and precautions, and be vigilant to changes as you age.**

REFERENCES

1. Australian Bureau of Statistics (2016). *Population by Age and Sex, Regions of Australia, 2016*. Cat. # 3235.0.
2. Queensland Government Statistician's Office (2015). *Queensland Government Population Projections, 2015 edition*. Queensland Government: Brisbane.
3. Australian Government, Department of Infrastructure and Regional Development, Bureau of Infrastructure, Transport and Regional Economics. (2016). *Road Safety of Older Australians - Recent Statistics, Information Sheet 50*. Canberra.
4. King, M., Soole, D., Watson, A. and Schramm, A. (2011). *Older Driver Safety Advisory Committee - Supporting Research and Consultation: Report to Department of Transport and Main Roads*.
5. King, M.J. (2004). *Intersection crashes involving older drivers: Relative involvement in urban and rural areas at night and by day*. In Road Safety Issues for older road users: CARRS-Q Monograph 1. CARRS-Q Monograph Series, 1. CARRS-Q, Carseldine, Qld, pp. 93-102.
6. King, M., Soole, D. and Neilson, A. (2007). *Development of road safety initiatives for the senior adult road safety project*, CARRS-Q report to Queensland Transport.
7. Queensland Transport, *Queensland Road Safety Action Plan 2006-2007*.
8. Australasian College of Road Safety, *Older road users' policy statement*, Canberra.

STATE OF THE ROAD is CARRS-Q's series of Fact Sheets on a range of road safety and injury prevention issues. They are provided as a community service and feature information drawn from CARRS-Q's research and external sources. See the reference list for content authors.

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