

Older road users



- At June 2011, 18.5% of the Queensland population were senior adults (aged 60+).¹ It is estimated that by the year 2031, one in five Queenslanders will be aged 65 years or older.²
- 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.
- Senior adults are very mobile and are likely to want to retain their mobility as long as possible. Given the ageing population of Australia, the development and implementation of initiatives to enhance the safe mobility of senior adults is increasingly important.
- In 2014 in Australia, 241 fatalities were senior adults aged 65 years or older (21% of the national road toll). Ten years ago, they represented a lesser 16% of the national road toll. Of these, 111 fatalities involved adults aged 65-74, while 130 were adults aged 75 years or older.³
- Of the 241 senior adults aged 65 years or older killed on Australian roads in 2014:³
 - 125 were drivers;
 - 40 were passengers;
 - 48 were pedestrians;
 - 13 were motorcycle riders; and
 - 15 were cyclists.
- In 2014 in Queensland, 34 fatalities were senior adults aged 65 years or older (15% of the state road toll). Of those fatally injured, 20 were adults aged 65-74 years and 14 were aged 75 years or older (9% and 6% of the state road toll respectively).³
- In 2014, compared to the national and Queensland rates of traffic fatalities per 100,000 of the population of 4.9 and 4.7 respectively, senior adults aged 65-74 were less likely to be killed in traffic crashes (5.7 per 100,000 population) and those aged 75 years and older experienced much greater rates of death in traffic crashes (8.6 per 100,000 population).³
- While young drivers have the highest crash risk, the relative changes in the proportions of young and older adults of driving age means that, even if young road users remain at a greater relative risk of traffic crash involvement, older adult road users are likely to account for a greater number of road crashes in absolute terms by 2056.⁴
- Assessment of figures regarding 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 senior adults aged 75 years and older who are considered most at fault in 80% of crashes in which they are involved.⁵
- The nature of fault is different for older and younger road users. Older drivers are less likely to drink drive, speed or engage in other deliberate risk-taking behaviour, when compared to younger drivers. Instead, crashes where 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 information.⁴

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 the 241 road fatalities for senior adults aged 65 years or older were pedestrians.³ Only a small proportion of pedestrian fatalities stem from risky road use on the part of the driver. Primary responsibility for the collision is fully or partially attributable to the pedestrian in about six of every seven cases.⁶

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

Why are older road users at higher risk?

- Driving a motor vehicle is a complex task involving factors such as perception, judgement and reasonable physical capability. A range of naturally occurring age-related conditions may impair many of these factors, thereby increasing the risk of being involved in a crash.



TIPS FOR STAYING SAFE

Getting older doesn't necessarily mean having to give up driving. Often, continuing to drive or stay mobile safely is as simple as following a number of safety tips. It is important to plan for the future, such that you take steps towards reducing the impact of natural changes that occur as you age before they occur, rather than waiting for a problem to be recognised. The following safety tips can help an older driver continue to drive and stay mobile safely for longer.

All older drivers should arrange regular health and vision checks.

For drivers/motorcyclists

- 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 control their exposure to risk when driving 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 extended recreational road trips) form a growing subgroup of highly mobile older road users. Their greater mobility both increases their exposure to risk, and reduces their access to emergency and injury treatment services as they are more likely to be 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:⁷
 - 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.

Most older drivers have not undertaken driving assessments since they obtained their licence. Brush up knowledge by reading the latest road rules and ask for honest driving feedback.

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. While health professionals may be able to assess an older driver’s medical fitness to drive, it is not necessarily possible to evaluate their ability to interact with the road and traffic environment unless being assessed while driving. The doctor may suggest a driving assessment, however, self-assessment and self-regulation are encouraged.

- Obtain a copy of the latest road rules and **check your knowledge** is current.
- **Consider RACQ’s Years Ahead Program**, which offers a range of initiatives to help older drivers safely stay mobile.
- **Obtain honest feedback** on your driving ability from people you trust (e.g. your children or close friends) and take steps to improve your driving safety.
- **Remain physically and mentally active** as you get older.
- Adjust your driving to **avoid situations** where you feel unsafe (e.g. peak traffic times, during low light, at night and in wet weather) or where you perceive the driving situation to be complex (e.g. roundabouts or right hand turns across traffic).
- Consider installing **Intelligent Transport System (ITS) devices** or purchasing vehicles with ITS features (e.g. night vision enhancement, intersection navigation assistance, automated lane changing assistance, collision warning, or intelligent cruise control). Please note however that caution should be taken with ITS devices to ensure they are not distracting.

Be aware of the impact of any medications being taken on driving ability and reaction times.

Plan travel times and routes to avoid peak traffic periods, complex road infrastructure and night driving.

For pedestrians

- Always **wear bright, clearly visible clothing** when walking – day or night.
- **Plan your route** to include footpaths, quieter roads and controlled crossing points. Avoid shortcuts or jay-walking.
- **Be cautious** about oncoming traffic and **assume that the traffic will reach you sooner than you estimate.**
- **Ensure that you can see all traffic** from all directions when you cross the road.
- Try to **find road crossing points** where you only have to judge gaps in the traffic in one direction at a time (e.g. a centre median refuge).
- Don't assume a driver has seen you. **Establish eye contact** with a driver before commencing your crossing. Remember that pedestrian walkways are shared with bicycles, motorised scooters and other recreational users and **keep an eye out** for them.
- **Ensure hearing aids are operating.**
- **Consider the possible impact of any medications** on reaction times, walking speed and your ability to judge traffic.

When walking, seek road crossing points where traffic gaps need to be judged in only one direction at a time (e.g. a centre median refuge)

CARRS-Q'S WORK IN THIS AREA

- Major report on older driver licensing in support of the Queensland Government's Older Driver Safety Advisory Committee.⁴
- 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. (<https://eprints.qut.edu.au/54489/>)



- 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. (<https://eprints.qut.edu.au/95287/> and <https://eprints.qut.edu.au/79671/>)
 - Put Yourself in the Picture - a resource for older drivers.
 - The growing social phenomenon of "Grey Nomads" and their risk of medical or road safety incidents in rural and remote areas. (<https://eprints.qut.edu.au/16876/>) Pedestrian travel: Getting Queenslanders walking safely.
 - A cross-cultural investigation of the efficacy of medication warning labels relating to driving. (<https://eprints.qut.edu.au/67132/>)
- 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.
 - A review of applicable design standards would be beneficial to accommodate the mobility limitations of older road users.
 - New engineering solutions may help to separate and protect vulnerable pedestrians from vehicular traffic.
 - Alternative transport solutions are required to enable non-drivers to access services and maintain a healthy, involved lifestyle.

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 and related piloting.
- Examine the potential for promotion of safer vehicles for older drivers.
- According to the Australasian College of Road Safety:⁸
 - 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.

Given the rapidly ageing population, the development and implementation of initiatives to enhance the safe mobility of senior adults is vital.



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

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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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