

- The crash risk for drivers is highest in the first 6–12 months of solo driving.
- Young drivers are 60% more likely to be involved in a serious crash than any other age group¹.



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

THE FACTS

What is the difference between a "young" and "novice" driver?

- Traditionally, young drivers include those up to 25 years of age.
- Novice drivers are "new to the road" (e.g. they hold provisional licences or have had very little driving experience).
- Young novice drivers therefore, are young adults who are comparatively new to the experience of driving or riding on the road.

Young novice drivers at risk

- Young drivers have high rates of involvement in road crashes in Australia and worldwide².
 Whilst the representation of young drivers in road fatalities has improved in recent years, they continue to be highly represented in fatality and injury rates.
- For young drivers in Queensland in 2015³:
 - 13.8% of the licenced driver population was aged 16-24 years.
 - ° One in five driver/rider fatalities on the road was aged 16-24 years.
 - Young drivers/riders with a provisional (P1/P2) licence had a higher involvement in fatal crashes than learners and open licenced drivers.
 - Regardless of age or experience, crash rates increased at the transition to an open licence⁴.
 - ° Young males were overrepresented in fatalities as a result of crashes.

- Newly licenced young novice drivers have a higher crash risk compared to experienced drivers⁴.
- The estimated yearly lifetime care cost of young drivers injured in road crashes is in the order of \$493 million⁵.
- Young drivers are over-represented in sleep related crashes⁶.

Put your mobile phone out of sight and on silent while driving to avoid the temptation.

Why are young novice drivers at risk?

- Young drivers are more likely to make driving errors because they are still developing the psychomotor, visual perception and hazard perception skills associated with driving.
- Young drivers could find themselves in riskier circumstances because they tend to overestimate their driving skills and abilities, whilst under-estimating risks and hazards associated with the road environment and their driving behaviour.
- Young drivers frequently drive smaller and older cars with fewer safety features or do not use the safety features such as seat belts.
- Interventions such as the Graduated Driving License (GDL) are unavailable

- to a proportion of young drivers who are at increased risk of road crash for a variety of reasons, e.g. unlicenced drivers, drivers with increased sensation seeking personalities, young drivers with limited compliance with GDL restrictions.
- Young drivers are influenced by parents or peers who might not realise their role in facilitating risky behaviours.
- Certain personal characteristics can place young drivers at higher risk of a road crash:
 - Age and gender younger male drivers are at higher risk than both older drivers and younger female drivers
 - Neurological and maturation process

 the adolescent period is associated with increased risk-taking behaviour attributed to the extended process of brain development.
 - Feeling strong emotions young drivers are more likely to drive because they experience, or want to experience, strong emotions such as excitement and anger.
- Lifestyle characteristics can also increase the crash risk of young drivers, including:
 - Increased exposure to high risk travel times – particularly at night and on the weekend for social (i.e. 'high alcohol hours') or employment commitments.
 - ° Competing commitments juggling study, work, family and time with friends can make young novice drivers vulnerable to fatigue, impacting on their hazard perception skills which exacerbates crash risk.



The most effective long- term method to reduce a young novice driver's crash risk is to gain more on-road driving experience.

How can young driver safety be improved?

- Follow the road rules and Graduated Driver Licensing restrictions (see Table 1) and information opposite. Research has shown that the implementation of GDL programs is an effective strategy in reducing the crash involvement of this group.
- Drive to the conditions. If it is raining, traffic is heavy or it is late at night, slow down and allow extra space between your car and the car in front.

Be vigilant of fatigue or sleepiness. **Take appropriate rest** before driving or use public transport.

- Conduct a self-assessment of how you are feeling before driving. Check if you are feeling:
 - Tired or sleepy. Avoid driving after long work or study sessions. Try to seek out alternative arrangements, for example getting someone to pick you up. Avoid quick fix 'stay awakes' such as double shot coffees and 'energy drinks' as they do not help to make better decisions in terms of driving behaviour. If you do have to drive, take regular breaks and stop the car if you feel sleepy.
 - Very emotional or angry. Take a few minutes to calm yourself down before getting into the car.
 - ° **Unwell.** Take regular breaks or consider alternative arrangements.
- Stay attentive at all times. Road and traffic conditions can change within seconds.

- Driving with groups of peers. Remember that you are in control of your vehicle and the safety of yourself, passengers and other road users.
- Make driving your priority at all times while in control of a vehicle. Limit loud music, let noisy passengers know that their behaviour is distracting, avoid interaction with electronic devices and other external unrelated driving distractions like electronic billboards.
- Do not use a mobile phone whilst driving, including calling, texting, accessing social media, accessing email, and using the camera function. Put phones and devices out of reach (e.g. in a bag on the backseat), on silent, or switch them to flight mode to avoid the temptation.
- Do not take your eyes off the road. Always pull over if you have to search for any object in your car.
- Do not consume alcohol or drugs if driving. It is illegal for a Learner or Provisional (P1/P2) driver to consume alcohol before driving in Quensland, i.e. your BAC must be 0.00. Open licence holder are permitted a BAC of 0.05. Remember that alcohol and drugs, including prescription medications, can affect driving for several hours after consumption. If taking prescription or over-the-counter medication, speak to your doctor or pharmacist about whether it's safe to drive.
- If you do decide to consume alcohol or drugs, plan ahead and use a designated driver, public transport or to stay overnight.
- Do not speed. Allow plenty of time to reach your destination; remember, every kilometre over the speed limit is a killer.

- Maintain a safe distance between your car and the one in front to allow you time to react to unexpected situations. Many crashes occur due to following too closely.
- · Wear your seatbelt.
- Scan ahead and around the car to anticipate potential dangers. Many crashes occur because drivers only watch the car in front.
- **Be aware** of blind spots associated with your vehicle.
- Identify potential hazards. If you encounter a potentially dangerous situation, try to analyse what others are doing and what the outcome might be and allow yourself space to react.
- Maintain your car by regularly checking tyre pressure and tread depth, and by proper mechanical and structural inspections, including whether safety systems such as seat belts and air bags are in sound operating condition.

Safer cars improve crash outcomes such as reducing death or injuries to drivers and others.

- Prioritise a car purchase decision based on safety features. Review the crash risk assessment of possible choices before buying a vehicle. Consider buying a vehicle with an Australasian New Car Assessment Program (ANCAP) (www.ancap.com.au)
 5 star rating.
- Plan your route so you can confidently navigate to your destination.

TABLE 1:

Summary of the current Learner Licence requirements and restrictions in Queensland graduated driver licensing program²⁵.

Requirements and Restrictions

Prior to Licensure

Minimum age	16 years
Mandatory education	No
Eye sight test	No
Road law & knowledge test	Yes

During Licensure

Duration license valid	3 years
Minimum holding period	<25 years old, 12 months >25 years old, 6 months
Practical test	No
Display L-plates	Yes
Mandatory education & instruction	No
Logbook required	Yes, <25 years old
Professional instruction 3-for-1	Yes

Conditions and Restrictions

Mandatory minimum driving	100 hours (10 hours at night)
Supervisory driving minimum requirements	Full licence 1year >0.05% BAC
BAC limit (mg/100mL)	Zero
Illicit drugs	No drugs
Minimum speed restriction	No
Mobile phone restriction (all use)	Yes
Towing restriction GVM	No
Demerit threshold	4 points in 12 months
Restrictions on locations	No

For further detail about the GDL conditions please refer to the Department of Transport and Main Roads website.



WHAT IS GRADUATED DRIVER LICENSING?

- Graduated driver licensing (GDL) is a licensing program for novice drivers and riders. GDL systems are designed to provide new drivers and riders with driving experience and skills gradually over time in low risk environments^{7,8}.
- While GDL programs vary around the world, they typically involve three levels of licence Learner, intermediate (Provisional), unrestricted (Open) with minimum durations, varying restrictions and driving privileges at each level.9 For some GDL programs, in addition to a practical driving assessment at the end of the Learner period, the novice driver must successfully complete testing to progress through the licence levels, such as the hazard perception test in Queensland.
- New Zealand was the first country to adopt a GDL program in 1987. Subsequently, GDL systems have been introduced into jurisdictions within Australia, Canada and the USA^{7,10}.

WHO IS GDL AIMED AT?

The groups that GDL programs target vary between jurisdictions. GDL programs can be aimed at either young drivers or all drivers that are new the road (novice drivers).

What does the GDL program look like in Queensland?

The Queensland Government implemented a revised and more comprehensive GDL program in 2007 after consultation with stakeholders on the issue of young driver and rider crashes. The new system includes a combined late night driving and passenger restriction, minimum supervision requirements for learner drivers and the requirement for provisionally licensed drivers to display 'P-plates'.

CARRS-Q WORK IN THIS AREA

CARRS-Q continues to be a leader within the domain of road safety for young and novice drivers. Some of our most recent research has focused on:

- Skills for Preventing Injury in Youth (SPIY) school-based first aid and peer protection program¹¹.
- Development of guidelines for developing and operating a Learner Driver Mentor Program¹².
- Peer passenger pressure on young drivers¹³.
- Young drivers' engagement with mobile phones when driving^{2,14-18}.
- The development and evaluation of public education messages to reduce speeding by young male drivers¹⁹.
- Understanding the role of psychosocial influences in young driver risky behaviour²⁰.
- Parent-specific interventions during novice licensure²¹.
- Young drivers representation in sleep related crashes⁶.
- Young male drivers' beliefs which influence speed²².
- Evaluation of young people's responses to a road safety docudrama²³.
- Young drivers' responses to anti-speeding advertisements²⁴.
- Young male drivers' deterrence perception²⁵.
- The use of gamification to foster safer driving behaviours in young males²⁶.

Resist passenger distraction and peer
pressure to take risks.



Parents could be encouraged to consider the role model they portray to their future young driver.

REFERENCES

- Queensland Government. (2006) Safer Roads, Safer Queensland: Queensland's Road Safety Strategy 2015-2021.
- Scott-Parker, B., & Oviedo-Trespalacios, O. (2017). Young driver risky behaviour and predictors of crash risk in Australia, New Zealand and Colombia: same but different?. Accident Analysis & Prevention, 99, 30-38.
- 3. Queensland Government. (2016). 2015 Summary Road Crash Report.
- Curry, A. E., Pfeiffer, M. R., Durbin, D. R., & Elliott, M. R. (2015). Young driver crash rates by licensing age, driving experience, and license phase. Accident Analysis & Prevention, 80, 243-250.
- Buckis, S., Lenné, M. G., & Fitzharris, M. (2015).
 An analysis of young driver crash types and the associated lifetime care cost in Victoria, Australia. Traffic injury prevention, 16(sup2), S66-S76.
- Filtness, A. J., Armstrong, K. A., Watson, A., & Smith, S. S. (2017). Sleep-related vehicle crashes on low speed roads. Accident Analysis & Prevention, 99, 279-286.
- Williams A, Shults R.A. (2010). Graduated Driver Licensing Research, 2007–Present: A Review and Commentary. Journal of Safety Research 41:77-84.
- Bates, L., Allen, S., Armstrong, K., Watson, B., King, M. & Davey, J. 2014, Graduated driver licensing: An international review, Sultan Qaboos University Medical Journal 14(4) 432-441.
- Bates L, Watson B, King M. (2009). Factors influencing learner driver experiences. Canberra: Department of Infrastructure, Transport, Regional Development and Local Government. http:// eprints.out.edu.au/19498/
- 10. Simpson H.M. (2003). The evolution and effectiveness of graduated licensing. *Journal of Safety Research* 34:25-34]
- 11. Chapman, R., Buckley, L, & Sheehan, M. (2012) Developing safer passengers through a schoolbased injury prevention program. *Safety Science*, 50(9), pp. 1857-1861.

- 12. Soole, D. W., Watson, B. C., & Bates, L. J. (2014) *Guidelines for developing and operating Learner Driver Mentor Programs*. Motor Accident Insurance Commission (MAIC), Brisbane, Qld.
- Horvath, Catherine, Lewis, Ioni M., & Watson, Barry C. (2012) Peer passenger identity and passenger pressure on young drivers' speeding intentions. Transportation Research Part F: Traffic Psychology and Behaviour, 15(1), pp. 52-64.
- 14. Gauld, C., Lewis, I., & White, K. M. (2014) Concealing their communication: exploring psychosocial predictors of young drivers' intentions and engagement in concealed texting. Accident Analysis and Prevention, 62, pp. 285-293.
- Gauld, C., Lewis, I., White, K., & Watson, B. (2016) Key beliefs influencing young drivers' engagement with social interactive technology on their Smartphones: A qualitative study. *Traffic Injury Prevention*, 17(2), pp. 128-133.
- 16. Gauld, C. Lewis, I., White, K., & Watson, B. (2016) Young drivers' engagement with social interactive technology on their smartphones: Critical beliefs to target in public education messages. Accident Analysis and Prevention, 96, pp. 208-218.
- 17. Gauld, C. S., Lewis, I., White, K. M., Fleiter, J. J., & Watson, B. (2017). Smartphone use while driving: What factors predict young drivers' intentions to initiate, read, and respond to social interactive technology?. Computers in Human Behavior, 76, 174-183.
- Oviedo-Trespalacios, O., Haque, M. M., King, M., & Washington, S. (2016). Understanding the impacts of mobile phone distraction on driving performance: a systematic review. *Transportation* research part C: emerging technologies, 72, 360-380.
- 19. Lewis, Ioni M., Watson, Barry C., White, Katherine M., & Elliott, Barry (2013) The beliefs which influence young males to speed and strategies to slow them down: informing the content of antispeeding messages. Psychology and Marketing, 30(9), pp. 826-841.

- 20. Scott-Parker, B., King, M. J., & Watson, B. (2015). The psychosocial purpose of driving and its relationship with the risky driving behaviour of young novice drivers. *Transportation research part F: traffic psychology and behaviour*, 33, 16-26.
- 21. Scott-Parker, B., Watson, B., King, M. J., & Hyde, M. K. (2015). "I would have lost the respect of my friends and family if they knew I had bent the road rules": Parents, peers, and the perilous behaviour of young drivers. *Transportation research part F:* traffic psychology and behaviour, 28, 1-13.
- 22. Lewis, Ioni M., Watson, Barry C., White, Katherine M., & Elliott, Barry (2013) The beliefs which influence young males to speed and strategies to slow them down: informing the content of antispeeding messages. Psychology and Marketing, 30(9), pp. 826-841.
- 23. Lewis, Ioni, Fleiter, Judy, & Smith, Julie (2015) Students' responses to the RACQ docudrama program. In 2015 Australasian Road Safety Conference, 14 - 16 October 2015, Gold Coast,
- Kaye, Sherrie-Anne, Lewis, Ioni, Algie, Jennifer, & White, Melanie J. (2016) Young drivers' responses to anti-speeding advertisements: Comparison of self-report and objective measures of persuasive processing and outcomes. Traffic Injury Prevention, 17(4), pp. 352-358.
- Freeman, James, Kaye, Sherrie-Anne, Truelove, Verity, & Davey, Jeremy (2017) Age, gender and deterrability: Are younger male drivers more likely to discount the future? Accident Analysis and Prevention, 104, pp. 1-9.
- Steinberger, F., Schroeter, R., & Watling, C. (2017)
 From road distraction to safe driving: Evaluating
 the effects of boredom and gamification on driving
 behaviour, physiological arousal, and subjective
 experience. Computers in Human Behavior, 75, pp.
 714-726

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.

FOR MORE INFORMATION

Marketing & Events Officer, CARRS-Q Queensland University of Technology 130 Victoria Park Road Kelvin Grove QLD 4059 Australia Phone Fax Email Twitter +61 (0)7 3138 4568 +61 (0)7 3138 7532 marketing.carrsq@qut.edu.au

Twitter @CARRS_Q Facebook www.facebook.com/carrsq130 CARRS





CARRS-Q is a joint venture initiative of the Motor Accident Insurance Commission and Queensland University of Technology