

Keeping the Nation Moving

October 2013

Young Driver Safety: Solutions to an age-old problem

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Introduction

One in five new drivers will have a collision within the first six months of driving.¹ The current learning-to-drive training, testing and licensing regime is not doing enough to prepare our nation's young people for solo driving. Reform is needed.

Car use among young people

Today there are 2.9 million full licence holders aged between 17 and 24² in Britain. In this age group, 59% held a licence in 1995, but this had declined to 46% by 2010.³ This is a much lower rate of licence holding in comparison to those aged 25 years and over.⁴

There is also a gender difference. Between 1995 and 2010, licence holding by young men reduced from 67% to 47%. Over the same period licence holding by women decreased from 51% to 45%.³

The reason for these changes is likely to be related to a combination of the following: greater access to higher education; changes in employment patterns; increased costs relative to earnings (housing and motoring in particular); the rise of virtual mobility (use of technology to substitute for travel); and the shifting pattern of traditional life stages (e.g. leaving home, buying a house, having children).







How do motoring-related costs affect licence holding among young people?

It is now common for young drivers to be offered annual insurance policies at a price well in excess of the value of the vehicle insured, in stark contrast to most other drivers. This is largely because young drivers are a greater risk to themselves and others while on the road, and the accidents they are involved in produce greater numbers of expensive, 'catastrophic' insurance claims. The cost of learning to drive is also a significant consideration in licence acquisition, being cited by 59% of 17- to 20-year-old non-drivers as a reason for not driving. Against this background, undesirable activities such as insurance fronting (getting insurance on the basis of a lower-risk 'main driver'), under-insurance and driving without insurance are all too common.

How will young people's car use change in the future?

Being able to drive is important to young people. It allows for independent access to employment, shops and other services, particularly for those in rural areas. It has status value

and offers a private space that may not be available elsewhere. The ability to drive can also be an important employment qualification. It is therefore important that any discussion on young drivers, particularly the road safety consequences of car use, acknowledges the mobility needs of this group, and the role of the car within this.

How safe are young drivers?

A disproportionate number of young people are killed and seriously injured on Britain's roads. Road deaths account for 0.5% of all deaths in Britain, but 25% of deaths among 15- to 19-year-olds. Those aged 15 to 24 are four times more likely to die from a road accident than from drug, alcohol or other substance poisoning combined. Young drivers (24 years and under) make up 25% of all those drivers killed or seriously injured on the road network, but account for only 8% of licence holders. They also drive, on average, less than half as far as those aged 25 and over. Young drivers are therefore at significantly greater risk for every mile travelled by car.

When are young drivers most at risk?

Young drivers are most at risk in certain circumstances. These include:

- driving at night, and over the weekend;8
- negotiating bends (rather than junctions);⁴
- travelling on urban roads;⁴

- driving on rural roads;^{5,9}
- driving with passengers;^{5,10} and
- being impaired by alcohol and drugs.^{5,11}

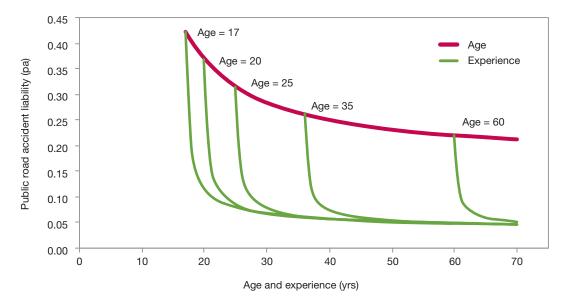
Why are young drivers more at risk?

There are a number of reasons why young drivers are more at risk than older drivers while driving. These include:

- Experience: Accident liability decreases sharply after the first six months of independent driving post-test. A 17-and-a-half-year-old with six months' driving experience has been found to be safer than a 60-year-old who has just passed their driving test. Donce a new driver has gained 1,000 miles worth of experience, their skills and safety on the road are equivalent to more experienced drivers.
- Age: Younger drivers have more collisions than older
 drivers. This is both a product of their age and experience
 with driving. Those learning to drive at age 17 have a crash involvement rate which is almost 50% higher
 than those learning at 25, and around double the level of those learning to drive at 60.



Figure 1: The effect of age (at passing test) and experience on collision involvement



- **Biology:** Between the ages of 17 and 24, young people undergo significant biological change. Young novice drivers are therefore at particular risk due to the biological and behavioural characteristics of youth.
- **Gender:** Male respondents have reported more road collisions than females at 6, 12, 24 and 36 months after passing their test.¹⁰
- Personality: Younger people have certain personality differences to their older peers. They are more prone
 to sensation-seeking, impulsivity and aggression. They are also more likely to be influenced by external
 factors such as peer pressure or parents.
- **Social norms:** Reckless behaviour in young people is very often influenced by their peers. Particularly in adolescence, this tends to encourage and reward actions that may increase safety risk on the road.

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- **Alcohol impairments:** The crash rate of drivers 21 years old or younger with a blood alcohol level of 0.5 g/l has been found to be more than twice that of drivers with the same blood alcohol level over the age of 21.14 This is thought to be due to the way younger people's bodies react to alcohol and the relative lack of experience they have with the effects of alcohol consumption compared to older drivers.
- **Drug impairments:** Illicit drugs are, in general, mainly detected among young male drivers, during all times of the day but predominantly at weekends.¹¹
- Fatigue impairments: Fatigue-related accidents tend to be more often caused by younger drivers, male drivers and drivers with poor sleep tendencies. ¹⁵ Younger drivers may not be as experienced at recognising when they are too tired to drive safely compared to older drivers. Young adults often require more sleep (9–10 hours a night) and therefore may accumulate sleep deprivation. Some (often young male) drivers may recognise fatigue but carry on regardless.
- **Distraction impairments:** Younger drivers are more likely to take part in distracting activities than the rest of the driving population. One particular form of distraction which is common among this group is texting while driving; 48% of this group admit to doing this. ¹⁶ Collisions involving young drivers driving groups of their peers are significant. In these collisions, driver distraction often increased by passengers who distract or encourage poor driving behaviour.

Today's young and novice driver licensing system

Today's licensing system in Britain allows for independent car driving from the age of 17. There have been a number of changes made to the driving test since its introduction in 1935, including a theory and hazard perception test, a set of in-vehicle questions and an independent driving section. On average, learners take 52 hours of professional lessons before taking their practical test, and the average learning time is 14 months. The current pass rate is 47%. The collision record of new drivers indicates that the test is not working as effectively as it should, especially given that those who find it easiest to pass – young men – are more likely to have a collision.





Creating safer young novice drivers

There are a number of ways in which the safety of young and novice drivers might be improved: education interventions (at school, pre-driver and post-test stages); improvements to the learning-to-drive and testing process; changes to licensing rules; and providing appropriate post-test support (e.g. telematics and technology, communications and publicity, engaging parents and adopting a safe systems approach to road development).

The RAC Foundation recommends primarily focusing on reforming driver training, the driving test and post-test licensing rules.



- Learning to drive and the driving test: Today's learning-to-drive approach does not adequately address the risky behaviours that can lead to collisions. There remains a strong sense among those learning to drive that it is only possible to learn to drive once the test is passed, indicating that the test is seen as artificial by many. Increasing the amount of experience learner drivers gain under supervision has been found to be effective at reducing solo driving licence liability, this while training that focuses learning on attitudes, behaviours and hazard perception as well as physical driving skills can also reduce road safety risk. Peer group-based discussions alongside traditional 'in-car' learning show some early promise. Minimum learning periods and logbooks to record hours of on-road experience and/or number of lessons have all been suggested as proxy mechanisms for increasing pre-solo driving experience.
- **Graduated Driving Licence:** Graduated driver licensing (GDL) involves a staged exposure to risk for newly qualified drivers and is used by a growing number of driving licence jurisdictions to reduce novice driver



exposure to risk, resulting in marked young driver casualty reductions. International research on a range of GDL schemes has found that fatal collisions among the vulnerable age groups studied have reduced by 9-60%, and overall casualties for these same groups by 5-32%. 10,19 GDL schemes typically include rules on night-time driving, passenger restrictions, lower alcohol limits and vehicle power limits the driver restrictions are based on particularly important risk factors for younger drivers. It has been estimated that a GDL system in Britain would result in 81-114 fewer deaths and 538-872 fewer serious injuries annually (depending on the extent of night-time and passenger restrictions applied). 10



End notes

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This factsheet was last updated October 2013.

The Royal Automobile Club Foundation for Motoring is a transport policy and research organisation which explores the economic, mobility, safety and environmental issues relating to roads and their users. The Foundation publishes independent and authoritative research with which it promotes informed debate and advocates policy in the interest of the responsible motorist.

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