

Mobile phone use: a growing problem of driver distraction



Distracted driving is a serious and growing threat to road safety. With more and more people owning mobile phones, and the rapid introduction of new “in-vehicle” communication systems, this problem is likely to escalate globally in the coming years. However, to date there is insufficient evidence on the risks associated with different sources of distraction, and what interventions can be put into place to reduce their impact upon road traffic crashes.

Mobile phone use:

There are different types of driver distraction, but the use of mobile phones while driving is of primary concern to policy-makers. Evidence suggests that this behaviour is increasing rapidly as a result of the exponential growth in the use of mobile phones more generally in society. Nonetheless, mobile phone use may be considered as one example of the broader problem of driver distraction.

Studies from a number of countries suggest that the proportion of drivers using mobile phones while driving has increased over the past 5–10 years, ranging from 1% to up to 11% at any one moment, with the use of hands-free mobile phones likely to be higher. In many countries the extent of this problem remains unknown, as data on mobile phone use is not routinely collected when a crash occurs.

Effects of mobile phone use on driving behaviour:

Using mobile phones can cause drivers to take their eyes off the road, their hands off the steering wheel, and their minds off the road and the surrounding situation. It is this last type of distraction – known as cognitive distraction – which appears to have the biggest impact

on driving behaviour. Evidence shows that the distraction caused by mobile phones can impair driving performance in a number of ways, e.g. longer reaction times (notably braking reaction time, but also reaction to traffic signals), impaired ability to keep in the correct lane, and shorter following distances. Text messaging also results in considerably reduced driving performance, with young drivers at particular risk of the effects of distraction resulting from this use.

Effects of mobile phone use on crash risk:

Studies suggest that drivers using a mobile phone are approximately four times more likely to be involved in a crash than when a driver does not use a phone. At the time of writing, there is no conclusive evidence to show that hands-free phoning is any safer than hand-held phoning, because of the cognitive distraction involved with both types of phones.

Interventions:

To date, there is little information on the effectiveness of interventions to reduce mobile phone use while driving. As a result, a number of countries are following an approach that has been known to be successful in addressing other key risk factors for road traffic injuries, such as in increasing seat-belt use, or reducing speed and drink-driving. This includes a combination of data collection, legislation, sustained enforcement, and public awareness campaigns. A similar approach that combines these measures is likely to be effective in tackling mobile phone use as well, and has begun in many countries.

Data collection and research

More work is needed to improve the systematic collection of mobile phone use in crash data to assess the extent and distribution of the problem

in individual countries. This will allow prevention efforts to be effectively targeted, while more research is also needed to better understand the impacts of different forms of mobile phone use – for instance, conversation, sending or receiving text messages – on driving behaviour and crash risk in real-life settings.

Legislation and enforcement

A number of countries have taken steps to legislate on mobile phone use, and a wide range of laws are being adopted: some countries focus laws on particular high-risk groups, such as young drivers, while others have applied a blanket ban on use of all mobile phones (hand-held and hands-free) and still others have taken the decision not to legislate at all on this issue. Whether or not laws prohibiting the use (and type of use) of mobile phones should be introduced, and who they should apply to, are decisions to be taken by national, state or provincial policy-makers, and will depend in part on the ability for enforcement to be continuous. Policy decisions on legislation should be based on the best scientific evidence available: to date, there is a lack of research that examines the effectiveness of legislation in sustaining reduced levels of use of mobile phones and even less evidence on the effects of these laws in reducing road traffic injuries or fatalities.

Employer policies

Road traffic crashes are a leading cause of occupational fatalities in many countries, leading to substantial human and financial losses for companies and organisations. Many companies now address distracted driving within fleet safety policies, limiting or prohibiting the use of mobile phones while driving. The possibility that employers may be liable for motor vehicle crashes involving employees while driving is also a strong incentive towards encouraging such a policy.

Increasing public awareness

Campaigns to increase public understanding of driving while distracted are likely to be important in tackling mobile phone use when used as part of a comprehensive strategy. Mobile phones have become increasingly integrated into all aspects of

our lives, making it all the harder to achieve the essential cultural shift towards accepting the dangers of using mobile phones when driving. Lessons can be learned from the success of road safety efforts to address drink-driving in a number of countries, which have resulted in this behaviour becoming considered a social taboo. Indeed, public awareness campaigns must strive to increase awareness of risk, so that manufacturers and consumers are not pushing the demand for increased in-vehicle technologies. Campaigns also need to increase awareness among the public that for drivers, hands-free phones appear to be as distracting as hand-held phones.

Technology

While the focus of this report is primarily on the distraction resulting from mobile phone use, technological systems within vehicles can also be used to protect against distraction more generally. For example, warning features that warn the driver of sudden lane departures may serve to reduce injuries related to distraction.

Conclusion:

Mobile phones have immense public utility, improving communication in social and commercial interactions. Nonetheless, their role in driver distraction and consequently in road traffic crashes means that some measure of “reining in” their use while driving is required. This will require legislative measures, creative ways of enforcement, some degree of regulation of industry, and a shift in societal perceptions about what behaviour is “acceptable” at the wheel.

Although work to generate evidence in this area is in its infancy relative to other aspects of road safety, it is important for governments to be proactive now. Considerable gains have been made in the area of road safety in many countries in the past few decades. If we are to maintain and improve on these gains, then managing the risks and benefits of technologies that are used while driving will be critical. Failure to act now could not only make it more difficult to address the issue at a later date, but would also lead to many more preventable traffic injuries and deaths on roads around the world.