

# Mobile phone use & distraction



- The Australian National Crash In-depth Study (ANCIS) revealed that 15.9% of crashes were distraction-related<sup>1</sup>.
- Naturalistic studies show hand-held phone use increases crash risk by a factor of 3.6<sup>2</sup>.
- Approximately half of drivers in Queensland admitted to using their mobile phone for browsing or texting while driving<sup>3</sup>.

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

### THE FACTS

- Approximately 84% of mobile phone users own a smartphone<sup>4</sup>. The greater functionality of smartphones (means they have the greater potential to distract a driver. A survey of 712 drivers in QLD and Victoria found 42% had texted, browsed the internet or emailed using a handheld mobile phone while driving a moving vehicle<sup>5</sup>.
- All mobile phone interactions that require taking your eyes off the road should be avoided<sup>6</sup>. There has been a focus on texting but the reality is that tasks such as reaching for a phone or calling are at least as risky<sup>3</sup>.
- Drivers are not good determining where and when is safe to use a mobile phone while driving. They overestimate their capability and do not necessarily understand the risks associated with mobile phone interactions.
- Some of the strategies used by drivers to avoid enforcement, such as texting with the phone in their laps (under the steering wheel), might put them in a higher risk<sup>7</sup>.

### Australian legislation

- It is illegal in all Australian states and territories to use a hand-held mobile phone while driving; including when your vehicle is stationary but not parked (e.g. when stopped at a traffic light). This includes all phone functions.
- It is illegal to use a hands-free phone while driving if it causes you to lose proper control of your vehicle.
- In some States, L, P1 and P2 drivers are not permitted to use a hand-held or hands-free mobile phone while driving.

### Queensland legislation

- Using your mobile hands-free is legal, as is using it for GPS/maps – store it securely in a cradle while driving. It is illegal to hold your phone near your ear, and to hold your phone in your hand to talk, text, call, turn it on or off, or any other function on the device, while you are driving - even if the car is stationary unless you are “legally parked” (stopped with the intention of staying in that place).
- **Make sure you know the rules.** Queensland drivers should refer to [StreetSmarts](#).

**Driving conditions can change quickly. You may not be able to safely respond to events if you are not paying attention to the road.**

### Why is using a mobile phone while driving dangerous?

- Distraction (including phone use) can impact driving in the following ways:
  - **Eyes off the Road** – driver takes eyes off activities critical for safe driving.
  - **Mind off the Road** – driver takes mind off activities critical for safe driving.
  - **Ears off the Road** – as a result of having one’s mind off the road, you are unable to listen for audible cues.
  - **Hands or Feet off the Controls** – driver takes hands or feet off controls that are critical for safe driving.
- Negotiating competing tasks while driving

- is very difficult. A simple conversation with a passenger can be problematic whilst driving in complex situations such as driving at peak hour, on unfamiliar roads, at night and in wet weather. Similarly, having a complex conversation whilst performing a simple driving task can compromise your capacity to react to unexpected hazards.
- Text messaging while driving is especially dangerous. An Australian simulator study found that young novice drivers spent about four times as much time looking away from the road when texting than when not texting<sup>8</sup>.
  - Research shows that dialling, texting and talking on a mobile phone while driving can lead to:
    - **Riskier decision making** – a driver’s ability to judge distances, speed, space and environmental conditions may be affected<sup>9</sup>;
    - **Slower reactions**<sup>10</sup>;
    - **Speed and vehicle control variations**<sup>11</sup>;
    - **Less controlled braking** – the driver will tend to brake later, with more force and less control<sup>12</sup>;
    - **Inappropriate actions at the onset of a yellow light at intersections**<sup>9</sup>; and
    - **Reduced awareness of the surroundings:** the driver will tend to spend less time checking their mirrors and monitoring the traffic and road environment.

### How to prevent mobile phone use while driving?

- An effective and easily accessible tool to prevent distracted driving is via the use of apps such as “do not disturb while driving” and “android auto”.

- CARRS-Q research has demonstrated that activating apps like these can reduce mobile phone use while driving by up to 30%<sup>13</sup>.

## CARRS-Q RECENT WORK IN THE AREA

CARRS-Q's Advanced Driving Simulator is a valuable research platform to develop insights into our understanding of distracted driving and mobile phone use. Recent research findings include:

- Mobile phone conversations impair the reaction times of young drivers when confronted with a traffic event that originates in their peripheral vision (e.g. a pedestrian attempting to cross a road from the footpath).
- Mobile phone distraction impairs the speed selection, acceleration, deceleration and headway distance of drivers during car-following; braking can be abrupt or aggressive; responses to traffic light changes can be delayed<sup>13</sup>.
- Development and evaluation of public education messages aimed at reducing the initiating, monitoring/reading, and responding smartphone communications among young drivers (17-25 years).
- The risk compensation behaviour of mobile phone distracted drivers to help identify technological interventions to reduce risks<sup>14,15</sup>.

- Distracted drivers using mobile phones for visual-manual tasks such as texting and browsing are unable to correctly manage their driving speed, putting them at a higher risk of a crash.
- The relationship between mental health (ie. mobile phone addiction, fear of missing out, connectedness) and mobile phone use while driving.
- The impact of distraction on the safety of other road users such as pedestrians and motorcyclists<sup>16,17</sup>.
- Development of best practice fleet policy regarding mobile phone use while driving to improve the safety of people driving for work purposes.

## FUTURE DIRECTIONS

- Future research may focus on:
  - Further comparisons of the levels and safety implications of legal (hand-held) and illegal (hands-free) mobile phone use while driving.
  - The optimisation of new road policing strategies using technologies such as cameras.
  - The effects of different types of hands-free phones (i.e. using an earpiece -v- a fully installed hands-free kit) and emerging technologies such as smartwatches, to inform safer policy.
  - Developing more effective means of

quantifying the involvement of mobile phones in road crashes.

- Evaluating the effectiveness of legislation changes and its enforcement.
- The psychosocial factors influencing mobile phone use to inform future interventions.
- Developing public education campaigns to minimise the perceived benefits of the behaviour, increase public disapproval, and highlight the preventable risks of this unsafe driving practice.
- Technological interventions to tackle safety issues associated with using mobile phones while driving.
- The impacts of vehicle automation and Advanced Driver Assistance Support systems (ADAS) on distracted driving.

**Never look at your mobile phone when driving (even when stopped at a red light). Pull over safely, park & turn off the engine, before using your phone.**

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