



# What about using a mobile phone while driving

## The issue

The use of mobile phones has grown rapidly in recent years. This increase has been accompanied by a rise in the number of individuals using the mobile phone while driving.

Mobile phones can be an important means of communication. When used properly, phones in cars can also have many benefits, providing valuable security and assisting in an emergency situation. However, using a mobile phone while driving can be distracting and this may increase the risk of an accident.

## Peripheral and central interference

"Peripheral" interference arises when a driver attempts to operate a vehicle and to handle a hand-held mobile phone at the same time. With the driver's attention diverted the ability to react quickly to road situations is reduced.

"Central" interference occurs when the cognitive demands of a mobile phone conversation compete with those required for driving. It has been shown that when mental tasks are performed concurrently, the overall performance of each is often worse than when each task is performed alone.

In assessing the possible impact of mobile phones on road safety, it is important to understand the contribution from both sources of interference.

## Using a hand-held mobile phone while driving

Research has shown that driving a vehicle while using a hand-held mobile phone can increase the risk of being involved in a road accident, both as a result of driving one-handed and the distractions posed by the phone itself.

It is well established that alcohol consumption impairs driving performance. Research has shown that certain aspects of driving performance are impaired more by using a phone than by being just over the legal alcohol limit.

## Using hands-free equipment while driving

While it may seem obvious that using a hand-held mobile phone could adversely impact a driver's ability to operate a vehicle, it is less obvious that similar consequences could arise from the use of hands-free equipment.

In previous studies analysis of mobile telephone use before and during road accidents revealed that there was no difference between the percentage of hands-free and non-hands-free users involved in these accidents. This indicates that a reduced peripheral ability to control the vehicle is not the most important factor in the reduction in road safety associated with mobile telephone use. A more important factor seems to be the reduction in attention associated with conducting the call itself. Anecdotal evidence suggests that the nature of the phone call conversation could affect the emotional state of the driver and in turn impair driving performance.

## **Not the only distraction**

Drivers also need to be aware of all possible distractions. An American Automobile Association study analysed more than 32,000 traffic accidents caused by various driver distractions and found mobile phones contributed to less than two percent of accidents, while an outside object, person or event contributed to more than 29 percent. Adjusting the radio or CD player contributed to more than 11 percent of accidents.

## **The law says....**

It is illegal in all Australian states and territories to use a hand-held mobile phone while driving. The motorist is, therefore, breaking the law by using a handheld mobile phone in a moving motor vehicle or even when stopped at traffic lights. Drivers who break the law face fines that vary from State to State.

## **Options**

It is recommended that the motorist parks the vehicle in a safe, designated place to make or receive calls when using a mobile phone. If a mobile phone must be used while driving it is recommended that a hands free kit is used.

A number of major reviews of the studies in this area recommend that drivers need to be educated about the appropriate use of mobile phones when driving. Consequently, a number of organisations have developed driving safety tips while using a mobile phone. These include:

- Don't Call in Heavy Traffic or Weather Conditions,
- Don't Engage in Complex or Emotional Conversations,
- Use Message Services to Answer Calls,
- Never Take Notes, Look Up Phone Numbers, Read or Send SMS,
- In Emergencies Use Your Phone to Call for Help,
- Use Your Phone to Help Others in Emergencies.

(Revised: July 2011)

**Fact sheets in the EME series are:**

- Fact sheet 1: *Electromagnetic energy and its effects*  
Fact sheet 2: *Government action on electromagnetic energy public health issues*  
Fact sheet 3: *Australian research into EME*  
Fact sheet 4: *The ARPANSA RF Exposure Standard*  
Fact sheet 5: *About mobile phones*  
Fact sheet 6: *About mobile phone networks*  
Fact sheet 7: *What about using a mobile phone while driving*  
Fact sheet 8: *Potential interference of mobile phones with pacemakers, hearing aids and other devices*  
Fact sheet 9: *What about base stations and telecommunications towers - are there any health effects?*  
Fact sheet 10: *What about broadcast towers - are there any health effects?*  
Fact sheet 11: *Mobile phones and children*

For further information you can visit the ARPANSA web site at:

**<http://www.arpansa.gov.au>**