# In hospitals and aeroplanes

The radio signals emitted by mobile phone systems can interfere with sensitive electronic equipment. In hospitals, aeroplanes and other restricted areas, observe the warning signs and switch off your mobile when required.

#### **SAR** values

It is possible to measure how much radio wave energy your body receives from each model of mobile phone. This is called the specific absorption rate or SAR. From 2001, there will be a European Standard method for measuring the SAR. This information will be provided to consumers for each model of mobile phone sold in the UK from this time. Users may wish to take account of these relative SAR values when choosing a mobile phone. All models sold in the UK already meet international exposure guidelines.

#### Hands-free kit

The level of effectiveness of hands free kit to reduce SAR is still uncertain. Further research is being carried out to investigate SAR levels when using phones with hands free kit and the results will be made available as soon as they are completed.

## Action by Government

The advice in this leaflet is based on a report for the Government, published in May 2000, by a group of independent experts led by Sir William Stewart. The group looked at recent research, took evidence from scientists, and listened to the views of the public at open meetings around the UK.

The Government is already putting some of its main recommendations into practice. On the advice of the Stewart Group further major research, funded by government and the mobile phone industry, is now being undertaken.

For further information visit the websites

- Department of Health www.doh.gov.uk/mobile.htm
- Report of the Stewart Group www.iegmp.org.uk
- World Health Organisation www.who.int
- National Radiological Protection Board www.nrpb.org.uk

or write to: NRPB, Chilton, Didcot, OX11 0RQ

If you are concerned about a mobile phone base station in your neighbourhood, look for the companion leaflet *Mobile phone Base stations and Health*.

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# Mobile phones and Health



## Using mobile phones

Over half the people in Britain have mobile phones. In a wide variety of settings - at work, at home, out and about, for convenience and security - they have become part of our way of life.

Mobile phones are low power devices that emit and receive radio waves. These connect each phone to a network of base stations, so that users can make and receive calls.

Radio waves have been used for communication for over 100 years. But the speed with which mobile phones have become so widely used is unprecedented. This has led to public concern about their possible impact on health.

This leaflet offers the latest information and advice based on both current knowledge and remaining uncertainties so that people can make their own informed choices about how to use mobile phones. It also outlines further work that is under way.

## Independent assessment

Radio waves emitted above a certain level can cause heating effects in the body. International guidelines seek to ensure that exposure is kept below that level. All mobile phones sold in the UK meet these guidelines.

The balance of current research evidence suggests that exposures to radio waves below levels set out in international guidelines do not cause health problems for the general population. However, there is some evidence that changes in brain activity can occur below these guidelines, but it isn't clear why. There are significant gaps in our scientific knowledge. This has led a group of independent experts – commissioned by Government and headed by Sir William Stewart – to recommend "a precautionary

approach" to the use of mobile phones until more research findings become available.

If you use a mobile phone, you can choose to minimise your exposure to radio waves. These are ways to do so:

- keep your calls short
- consider relative SAR values (see over page) when buying a new phone.

#### Driving

Anything that distracts a driver increases the risk of an accident - posing a threat to pedestrians, cyclists, passengers and other road users. You must be in proper control of your vehicle while you are driving. Any lack of concentration or momentary inattention may result in your being prosecuted. Even using a hands-free phone while driving will distract you. For more details see leaflet "Mobile Phones and Driving" issued by the Department of the Environment, Transport and the Regions.

# Children and young people under 16

Mobile phones are very popular with young people and have obvious attractions for personal security and keeping in touch with others. Parents and young people should make their own informed choices about the use of mobile phones. The current balance of evidence does not show health problems caused by using mobile phones. However the research does show that using mobile phones affects brain activity. There are also significant gaps in our scientific knowledge. Because the head and nervous system are still developing into the teenage years, the expert group considered that if there are any unrecognised health risks from mobile phone use, then children and young people might be more vulnerable than adults.

The expert group has therefore recommended that in line with a precautionary approach, the widespread use of mobile phones by children (under the age of 16) should be discouraged for non-essential calls.

In the light of this recommendation the UK Chief Medical Officers strongly advise that where children and young people do use mobile phones, they should be encouraged to:

- use mobile phones for essential purposes only
- keep all calls short talking for long periods prolongs exposure and should be discouraged

The UK CMOs recommend that if parents want to avoid their children being subject to any possible risk that might be identified in the future, the way to do so is to exercise their choice not to let their children use mobile phones.

#### At work

Mobile phones are often used at work.

They can have benefits for safety,
efficiency and convenience of
employers and staff. Employers have
legal duties to protect the health
and safety of their employees. The
Health and Safety Executive advises
employers that they should instruct staff not to use
mobile phones while driving, or doing anything else
where safety is important and their use might interfere
with concentration.

Where employers require staff to use a mobile phone, and concerns about possible health impacts are raised, employers could respond by, for example:

- explaining that mobile phones operate within international guidelines
- giving staff a copy of this leaflet
- discussing with concerned staff ways to reduce mobile phone use.