

The logo for the Mobile Operators Association (MOA) features the lowercase letters 'moa' in a white, sans-serif font, positioned inside a dark blue, teardrop-shaped graphic that points towards the top right.

mobile  
operators  
association

responsible  
network  
development

# Mobile Phone Health and Safety – Update 2006

## Summary

In the past five years, the mobile phone health issue has been subject to no less than 30 scientific reviews carried out within the UK and overseas.<sup>1</sup> In all cases, these reviews have come to similar conclusions, that "There have been no adverse health consequences established from exposure to RF fields at levels below the international guidelines on exposure limits published by the International Commission on Non-Ionizing Radiation Protection."<sup>2</sup> Despite this some local residents remain very concerned about perceived health effects when mobile phone base stations are built close to their homes or near their children's schools.

## Health and safety

All mobile phones and base stations in use in the UK comply with the international health and safety public exposure guidelines recommended by the International Commission on Non-Ionizing Radiation Protection (ICNIRP), set by an independent body of scientific experts. The ICNIRP guidelines have been adopted for use in the UK by the Health Protection Agency and are also widely used internationally on the recommendation of the World Health Organisation. All planning applications for a base station in the UK must be accompanied by a certificate of ICNIRP compliance.

The exposure guidelines developed by ICNIRP are based on a careful analysis of the scientific literature (taking into account both thermal and non-thermal effects) and provide protection against all identified hazards of RF exposure with large safety margins. There are no known adverse health effects at exposure levels below these guidelines.

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**Mobile phones cannot work without a network of base stations in places where people want to use them.**

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**No less than 30 scientific reviews worldwide in the past five years have not found adverse health effects caused by mobile phone base stations operating within the international health and safety guidelines used in the UK.**

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# UK health reports

In the UK, the report of Independent Expert Group on Mobile Phones, known as The Stewart Report, was published in 2000. This was followed in January 2004 by the National Radiological Protection Board's (NRPB - now part of the UK Health Protection Agency) independent Advisory Group on Non-ionizing Radiation (AGNIR) review of the science. In January 2005, a further report, updating the advice contained in the Stewart Report, was published by the NRPB.

- The Stewart Report concluded *"The balance of evidence to date suggests that exposures to RF radiation below NRPB and ICNIRP guidelines do not cause adverse health effects to the general population"*. It made a series of recommendations on the issue of mobile telephony and health, including that *"as a precautionary approach, the ICNIRP guidelines for public exposure be adopted for use in the UK... This would bring the UK into line with other countries in the European Union"*.<sup>3</sup> This recommendation was immediately adopted by the industry in the UK.
- The AGNIR report confirmed that the balance of evidence to date shows that mobile telephony is unlikely to have an adverse effect on human health. It said: *"Exposure levels from living near mobile phone base stations are extremely low, and the overall evidence indicates that they are unlikely to pose a risk to human health."*<sup>4</sup>
- The NRPB report (January 2005) confirmed the precautionary advice of the Stewart Report, and also continued to provide scientific reassurance to the public and policy makers alike. It said: *"Since [the Stewart Report] the widespread development in the use of mobile phones world-wide has not been accompanied by associated, clearly established increases in adverse health effects. Within the UK, there is a lack of hard information showing that the mobile phone systems in use are damaging to health. It is important to emphasise this crucial point."*<sup>5</sup>

Since the publication of the NRPB report, further reviews of the scientific evidence have been undertaken in the UK, France, Holland and Sweden, and have come to similar conclusions. <sup>6</sup>

In response to the Stewart Report in 2000, the UK Department of Health published two leaflets providing advice and guidance to the public, one on 'Mobile Phone Base Stations and Health' and one on 'Mobile Phones and Health'. These are available on the Department's website at [www.dh.gov.uk](http://www.dh.gov.uk).

## Ofcom base station audits

Other measures recommended by the Stewart Report included the establishment by Ofcom of its Sitefinder database and base station RF emissions audit programme. Over 500 base stations, mostly near schools and hospitals, have now been audited and these have confirmed that exposures of the public from base stations are small fractions of the ICNIRP guidelines. <sup>7</sup>



# The World Health Organisation position

In May 2006 WHO published a factsheet on mobile phone base stations and public health. The WHO position, contained in the factsheet is *"Considering the very low exposure levels and research results collected to date, there is no convincing scientific evidence that the weak RF signals from base stations and wireless networks cause adverse health effects."*  
<http://www.who.int/mediacentre/factsheets/fs304/en/index.html>

## UK and international research programmes

In the UK, in response to the recommendations of the Stewart Report, the Mobile Telecommunications Health Research (MTHR) programme was established. This has been jointly funded by UK governments and industry, although the research undertaken is completely independent of its funders. The first phase of this research programme is now coming to a conclusion, and the results of the individual studies funded through the MTHR programme are expected towards the end of 2006. (Further information can be found at <http://www.mthr.org.uk/>). The MOA will publish a briefing on the MTHR programme when its summary report is published. Operators are in discussions on funding for the second phase of the MTHR programme.

None of the MTHR research published to date has demonstrated adverse health effects from mobile telephony.

Information on the various studies undertaken into possible health effects from exposure to electromagnetic fields (EMF) is available from the World Health Organization (WHO) website: <http://www.who.int/peh-emf/research/database/en/>

The MOA will publish a briefing on the MTHR programme when its summary report is published. Operators are in discussions on funding for the second phase of the MTHR programme.



## Further information

"Considering the very low exposure levels and research results collected to date, there is no convincing scientific evidence that the weak RF signals from base stations and wireless networks cause adverse health effects."

World Health  
Organisation,  
Fact Sheet 304,  
May 2006

Further information on the work of the MOA and links to health reports and other sources of information can be found on our website at [www.mobilemastinfo.com](http://www.mobilemastinfo.com)

If you wish to contact the MOA, please call (020) 7331 2052 or email [info@ukmoa.org](mailto:info@ukmoa.org).

- <sup>1</sup> 26 reviews were set out in appendix D of the NRPB report "Mobile Phones and Health 2004" [http://www.hpa.org.uk/radiation/publications/documents\\_of\\_nrpb/pdfs/doc\\_15\\_5.pdf](http://www.hpa.org.uk/radiation/publications/documents_of_nrpb/pdfs/doc_15_5.pdf). 4 further reviews have since been published.
- <sup>2</sup> (WHO website statement, July 2005) [http://www.who.int/pehemf/meetings/ottawa\\_june05/en/index4.html](http://www.who.int/pehemf/meetings/ottawa_june05/en/index4.html)
- <sup>3</sup> Paragraph 1.27, the Stewart Report.
- <sup>4</sup> Paragraph 20, pp 148, Summary and Conclusions, "Health Effects of Electromagnetic Fields"
- <sup>5</sup> Paragraph 9, page 6, Executive Summary "Mobile Phones and Health 2004"
- <sup>6</sup> The Health Council of the Netherlands report can be found at <http://www.gr.nl/pdf.php?ID=1281&p=1>. The Swedish Radiation Protection Authority report can be found at [http://www.ssi.se/PdfUpload/SSI\\_EMF\\_2005.pdf](http://www.ssi.se/PdfUpload/SSI_EMF_2005.pdf)  
The AFSSE report can be found at [http://www.afsse.fr/upload/bibliotheque/230562873001035392960231527419/opinion\\_mobile\\_telephony\\_2005.pdf](http://www.afsse.fr/upload/bibliotheque/230562873001035392960231527419/opinion_mobile_telephony_2005.pdf)  
The BMA mobile phones and health update can be found at <http://www.bma.org.uk/ap.nsf/content/mobphonupd?opendocument&highlight=2,mobile>
- <sup>7</sup> The Sitefinder database and base station audits can be found on the Ofcom website <http://www.sitefinder.radio.gov.uk/>.

The Mobile Operators Association represents the interests of the UK's five mobile phone network operators – 3, O2, Orange, T-Mobile and Vodafone – on radiofrequency health and associated planning issues.



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