



Environmental Working Group Guide on SAR and Mobile Phones

In September 2009 the Environmental Working Group (EWG), a public health advocacy group based in Washington D.C, presented an "online guide" on the amount of radio frequency (RF) energy absorbed when using a mobile phone. The unit of measurement for this value is Specific Absorption Rate (SAR).

EWG stated in its press release that this database comprises about 1000 phone models available in the USA. It should be noted that the SAR data was taken from publicly available information already provided by phone manufacturers. MMF members have a long-standing practice of voluntarily making SAR information easily available to consumers around the world through user manuals and company websites.

The MMF however takes issue with the EWG's presentation of SAR as a basis for comparing mobile phones for safety. SAR is a laboratory measurement designed to determine a phone's compliance with exposure limits before it is placed on the market. Although the SAR is determined at the highest certified power level in laboratory conditions, the actual SAR during normal operation can be well below this value. More importantly, variations in SAR do not mean there are variations in safety. While there may be differences in SAR levels between phone models, all mobile phones must meet national and international guidelines governing RF exposure.

The EWG report also presents views about potential risks of mobile phones that are not shared by leading scientific experts and public health authorities. According to Michael Thun, MD, the emeritus head of epidemiology research for the American Cancer Society, the EWG's claim that 'evidence of ill effects is rising' is faulty: "Basically the idea that there is a sea change in the evidence in the past two or three years is incorrect". He added "Essentially this report focuses on studies that support their hypothesis that cell phones increase brain cancer risk. The description of the evidence selectively emphasizes the studies that suggest the risk and omit the evidence that suggests no risk."¹

In August 2009, the International Commission on Non-Ionizing Radiation Protection (ICNIRP) published a Statement² after a comprehensive, multi-year review of the weight of available scientific evidence related to mobile phone safety. ICNIRP concluded: "*[T]he scientific literature published since the 1998 guidelines has provided no evidence of any adverse effects below the basic restrictions and does not necessitate an immediate revision of its*

¹ <http://www.webmd.com/cancer/news/20090909/report-stirs-debate-on-cell-phone-safety>

² <http://www.icnirp.org/documents/StatementEMF.pdf>



guidance on limiting exposure to high frequency electromagnetic fields". ICNIRP emphasizes in the Statement that the recommended exposure limits contain substantial safety margins, i.e., a large reduction factor of 50 (5000%) for the general public.

It should also be noted that EWG is also critical of internationally accepted EMF exposure standards. This places the EWG at odds with the conclusions drawn by the 100-plus reviews, reports and government statements that have been published in this area³ from countries around the world. These reviews have all arrived at very similar conclusions, essentially -- *that there is no established evidence that EMF exposure within the internationally accepted limits causes any adverse health effects.*

The mobile telecommunications industry takes all questions regarding the safety of mobile phones seriously and the MMF was established to support ongoing scientific research in this area as well as to provide access to authoritative advice to consumers concerned by these issues. More information on SAR and related issues is available from the MMF's website at www.mmfai.org.

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³ <http://www.gsmworld.com/health/links/independent.shtml>