



Comments on research of the “Hardell group”

A recent paper¹ by Swedish researchers has reported associations between the use of mobile and cordless phones and elevated risks of malignant brain tumours. The researchers, led by Dr Lennart Hardell, pooled data reported by the same group in 2003 and 2005. The conclusions of all three papers are at odds with most other studies in this field.

The Swedish Research Council is a government agency under the Swedish Ministry of Education, Research and Culture. In its report *Research About Health Effects of Electromagnetic Fields*,² the Council noted that Dr Hardell’s “strongly-committed research team ... has produced controversial and contradictory results” and that the “team tends to underestimate some of the methodological difficulties”.

In response to the paper, the US Food and Drug Administration (FDA) released a public statement (6 April 2006).³ The FDA statement noted that a number of published studies have explored associations between long-term phone use and brain cancer. The latest findings by Hardell *et al*, the FDA said, “are inconsistent with results obtained in the other long-term studies.” Noting that the Hardell *et al* study’s design was “significantly different from the other studies”, the FDA added, “[t]hese facts along with the lack of an established mechanism of action and supporting animal data makes the Hardell *et al*’s finding difficult to interpret.”

The International Agency for Research on Cancer (IARC; an agency of the World Health Organization) has been coordinating a 13-country project investigating potential links between mobile phone use and cancer. Several countries participating in the INTERPHONE project have already reported results, including Sweden. IARC is expected to release the results of the combined analysis of the data from all 13 countries during 2006.

Hardell *et al*’s findings are in conflict with the results of the Swedish section of the INTERPHONE project as well as those in other INTERPHONE countries.⁴

Over the last ten years, more than 20 national and international expert groups have extensively reviewed research into the safety of mobile phones. Each of those expert groups has concluded that there is no established evidence of any adverse health effects from exposure to radio waves from mobile phones and their base stations.

¹ Pooled analysis of two case-control studies on use of cellular and cordless telephones and the risk for malignant brain tumours diagnosed in 1997-2003, [Hardell et al., International Archives of Occupational and Environmental Health](#). On line publication 16 March 2006

² Swedish Research Council, Forskning om hälsoeffekter av elektromagnetiska fält, see <http://www.vr.se/publikationer/sida.jsp?resourceId=241> (summary in English not available online).

³ FDA, see <http://www.fda.gov/cdrh/wireless/braincancer040606.html>.

⁴ Refer to the abovementioned FDA statement for links to the available results from the INTERPHONE project.