The Health Protection Agency

Brain tumour risk in relation to mobile telephone use:
results of the Interphone international case-control study

A statement from the Advisory Group on Non-Ionising Radiation (AGNIR)

The independent Advisory Group on Non-Ionising Radiation (AGNIR), which reports to the Health Protection Agency, has reviewed the INTERPHONE study for the Agency.

This statement sets out the collective views of members of AGNIR other than Professors Swerdlow and Feychting, who as members of the INTERPHONE Study Group were authors of the paper to which it refers. Professors Swerdlow and Feychting were not involved in drafting or agreeing the statement.

AGNIR welcomes this new report, which brings together the main findings from the INTERPHONE study.

The INTERPHONE study was well designed and carefully conducted, and has contributed importantly to our understanding of possible health risks from use of mobile phones. As with all epidemiological studies, and particularly case-control investigations that rely on recall of complex past exposures from memory, there are uncertainties in interpretation. Nevertheless, within the limits of those uncertainties, which are discussed at some length in the report, the study provides no clear, or even strongly suggestive, evidence of a hazard. Moreover, it indicates that if there is any hazard of brain cancer or meningioma from use of mobile phones then the risk during the initial 10-15 years of use must be small.

This conclusion is consistent with the findings of most other epidemiological studies that have examined the relation of brain tumours to use of mobile phones, and also with the absence of demonstrable effects on cancer incidence when laboratory animals have been exposed to radiofrequency radiation experimentally.

Because mobile phones have only been in widespread use for less than 20 years, the INTERPHONE study could not address the possibility of longer term risks to health. Given the enormous scale on which the technology has been adopted, there is therefore a need for continuing epidemiological surveillance to ensure that any adverse effects are detected at the earliest possible stage. The recently launched COSMOS study, which is being funded in the UK as part of the Mobile Telecommunications and Health Research (MTHR) programme, will contribute importantly to meeting this need.

Meanwhile, AGNIR is currently conducting a further comprehensive review of the health risks from radiofrequency radiation, which will take into account findings from the INTERPHONE study along with other relevant research that has been published since its last review in 2003. The new review is expected to be completed over the next 12-24 months.

Last reviewed: 25 May 2010