

# **Agence française de sécurité sanitaire environnementale (AFSSE)**

## **SUMMARY ON MOBILE PHONES AND HEALTH 2004-2005**

### **1 Summary**

The group of experts points out the incredible speed of development concerning the use of radio technologies during recent years, and the considerable number people using these devices. The group collected and interpreted new the results stemming from worldwide research and prepared research recommendations, which are in agreement with those of WHO.

The group also provided some risk management guidance.

#### **1.1 Risk assessment**

##### **1.1.1 Mobile phones**

The group of experts considers that it cannot make definitive conclusions to date on the existence of health effects caused by the electromagnetic fields of mobile phones. This scientific judgement is based on:

- the lack of hindsight on the epidemiological studies on cancer published to date and their lack of strength hindering the precise inventory of the dose-effect relationships,
- the recent Swedish publication indicating a possible increase in neurinoma in the vestibuloacoustic nerve on the side of the ear exposed to the mobile phone, in addition to the positive results of a previous Swedish study and the negative Danish results in terms of incidence,
- the new negative epidemiological results stemming from Sweden concerning other head tumours,
- the insufficient data concerning the other types of illnesses or specific populations (for example children),
- the mainly negative experimental results and the fact that we are waiting for data from the largescale projects still in progress (in particular concerning the permeability of the blood-brain-barrier and the co-promotion of tumours).

Thus, the group of experts recommends maintaining a state of scientific vigilance, while waiting, in particular, for the results of the Interphone study which should clear up a certain number of questions because of its scale and power, as well as those of the large experimental replication studies still in progress.

Moreover, the group of experts recommends initiating research on potentially more sensitive populations (such as children) and continuing the studies on the possible health effects of new signals.

##### **1.1.2 Base stations**

With regard to the possible health effects of base stations, the group of experts considered that no new study provides elements indicating such effects. In the current state of scientific knowledge, such effects are not proven.

However, the group of experts stresses the need to assess the new personal dosimetry devices (exposure metres) which will make it possible to identify the real levels of exposure to the fields enabling the potential implementation of epidemiological studies on a large scale in the general population.

##### **1.1.3 "TNO" study**

The group of experts considered that due to the many inadequacies of the "TNO" study protocol, it is necessary to wait for the replication studies currently in progress before planning to carry out new studies.

## **1.2 Risk management**

Concerning risk management, the group of experts recognized the relevance of the Afsse recommendations and recommends making compulsory the application of the provisions stated in the circular dated of October 2001 and its future developments.

### **1.2.1 Mobile phones**

The precautionary approach recommended by Afsse results in an incentive to decrease exposure to mobile phones, which must apply to the whole population, including children, people using mobile phone for work, etc. In particular, all means for limiting exposure must be studied:

- initiatives facilitating the use of hands-free kits by the greatest number of people possible or the "user-friendliness" of the kits allowing mass use,
- devices with a minimal SAR level,
- information campaign targeting parents and young people,
- recommendations on how to use the mobile,
- control over the advertising, etc.

The kits should reduce the absolute SAR of the "mobile phone plus kit" unit, knowing that a SAR level below 0.01 W/kg cannot be measured.

### **1.2.2 Base stations**

Despite the absence of proven effects on health of base stations, it is necessary to implement the cautionary principle recommended by Afsse, while remaining attentive to complaints which can be used as alerts. Adapted means must be created to this end.

During the installation of new networks, a permanent dialogue with local communities and the public must be implemented (applying the AMF-Afom good practice guide)

. A global plan of sampled measurements (all frequencies, all configurations) should be implemented by the authorities, in order to ensure adequate measurement representation to assess the exposure of the French population.