Oue, d. 11. marts 2014

Til Folketingets Sundheds- og Forebyggelsesudvalg

Ref.: Sundhedsstyrelsens (SST) politik om elektromagnetiske felter (EMF).

Vi har i maj måned 2013 henvendt os til alle medlemmer af sundhedsudvalget, men har ikke fået meget respons[1]. Vi prøver igen og håber at få mere respons denne gang. De forhold, EHS- ramte bydes af det danske system, er ikke holdbar, vi har behov for beskyttelse og især forståelse.

Vi er meget bekymrede og samtidig meget påvirkede af SST's politik angående EMF. Bekymrede fordi SST misinformerer befolkning og politikere (jer), og påvirkede idet strålingen skader vores medlemmer og forringer befolkningens sundhedstilstand generelt.

Der er helt **klart** og **offentligt tilgængeligt** videnskabeligt bevis på, at langtidspåvirkning af lav intensitet, Radio Frekvent (RF) EMF er sundhedsskadelig. EMF er bl.a. hormonforstyrrende, genotoksisk, giver lækage i blod-hjernebarrieren, påvirker immunforsvaret og giver Elektro Hyper Sensitivitet (EHS), også kaldt el-overfølsomhed.

WHO har i 2011 opgraderet RF EMF til at være muligvis kræftfremkaldende[2]. Europarådet har udsendt Resolutionen 1815[3], hvor det kraftigt anbefales alle EU lande at anvende forsigtighedsprincippet, men SST har valgt ikke at følge resolutionen med den begrundelse, at Europarådet ikke er et EU-organ. SST har heller ikke fulgt EU Parlamentets Resolution fra 2009[4], hvor medlemsstaterne bl.a. rådes til at revidere grænseværdierne for EMF og anerkende EHS som et fysisk handicap. Endelig har SST set bort fra EEA's (Det Europæiske Miljøagentur) rapporter om anbefalinger om anvendelse af forsigtighedsprincippet[5].

Hver gang vi skriver til SST (eller ministrene) for at konfrontere dem om vores situation, får vi et standardsvar fra SST om, at de: "*vurderer ud fra den nuværende viden, at der ikke er en generel trussel mod folkesundheden ved radiofrekvente elektromagnetiske felter (RF EMF) i samfundet, så længe de fastsatte grænseværdier og anbefalinger overholdes*".
Grænseværdierne for RF EMF beskytter kun mod termiske skader (dvs. skader forårsaget ved

[1] Henvendelsen fra maj måned 2013 er vedhæftet
[2] Vedhæftet: IARC press release 208 fra 2011.
[3] - Europarådets resolution link om mobilstråling, på dansk
[4] - European Parliament resolution of 2 April 2009 on health concerns associated with electromagnetic fields (2008/2211(INI)) : http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P6-TA-2009-0216+0+DOC+XML+V0//EN
[5] EEA Report No 1/2013: Late Lessons from early warnings: science, precaution, innovation. Læs især fra side 509 til 530, kapitlet 21 om "Mobile phone use and brain tumour risk: early warnings, early actions?": http://www.eea.europa.eu/publications/late-lessons-2

opvarmning af vævet), men ikke mod biologiske skader ved langtidspåvirkning, der opstår **langt under** de nuværende grænseværdier.

Det er forkert, at seniorforsker Christoffer Johansen fra Kræftens Bekæmpelse rådgiver SST angående EMF. Christoffer Johansen er kræftforsker, og kræft er ikke den eneste sundhedsskade, som EMF forårsager. Desuden har Christoffer Johansen tilknytning til industrien[6] (Han har bl.a. fået et meget stort [7]beløb fra TDC og Sonofon i forbindelse med et forskningsprojekt fra 1994-2000). Kræftens Bekæmpelse hænger alt op på et par enkelte statistiske undersøgelser, og netop statistik kan ikke bruges i denne sammenhæng, da hele befolkningen i dag er påvirket af alverdens RF eller lavfrekvente (LF) EMF kilder, også i egne hjem - så en kontrolgruppe findes reelt ikke i Danmark eller EU.
Det vil sige, at Kræftens Bekæmpelse rådgiver SST forkert, SST rådgiver ministrene, sundhedssektoren og offentligheden forkert. SST bagatelliserer risikoen på en uansvarlig måde.

Konsekvenserne af den forkerte rådgivning er:
- at regeringen vil fremme trådløs teknologi i alle offentlige institutioner, arbejdspladser og transportmidler både til voksne og børn uden at fortælle, at udstyret afgiver sundhedsskadelig stråling,
- at der er et overdrevet antal antennemaster til mobiltelefoni i Danmark, og flere påtænkes opsat,
- at mobiltelefoner, iPads m.fl. anvendes som tidsfordriv og legetøj både af voksne og børn,
- at de fleste læger intet ved om EMF skadevirkninger, og ligesom den almene befolkning ikke engang tror, at der findes en skadevirkning,
- at der er mange "uforklarlige" syge mennesker,
- at flere og flere får EHS, og at mange har EHS uden at vide det.

EHS er en fysisk, miljøbetinget lidelse med mange og varierende symptomer, som mindskes eller forsvinder, når eksposition for EMF undgås. EMF medfører biologiske effekter hos alle mennesker, men nogle er mere sensitive end andre.

SST misinformerer alle, også jer, folketingsmedlemmer. Jeg vil gerne bede jer spørge sundhedsministeren om følgende:
- Hvorfor bliver SST ved med at ignorere de tusinder af **klare** og **offentligt tilgængelige** biologisk videnskabelige beviser på, at langtidspåvirkning af lav intensitet, radiofrekvent EMF er sundhedsskadelig[8]?
- Hvem sorterer informationen, så kun få statistiske forskningsresultater danner grundlag for

[6] http://sundhedsstyrelsen.dk/~/media/66FF20387B964271B40FFFC2302E795B.ashx
[7] http://www.information.dk/88332
[8] Link til video, hvor den svenske forsker Olle Johansson fortæller på engelsk om Seletun erklæringen 2009 med appel om begrænsning af strålingen: 18 minutters video , og
Bioinitiative Rapport 2012, rapport med over 1500 sider om EMFs skadevirkninger:
http://www.bioinitiative.org/ og især: punkt F i Sektion 24: Electro Hyper Sensitivity (EHS) studies.

SST' udtalelser, når man reelt ikke længere har nogen kontrolgruppe i Danmark eller EU?
- Hvorfor bliver der kun talt kræft når SST udtaler sig om ikke ioniserende stråling?
- Hvorfor følger regeringen ikke anbefalingerne fra Det Europæiske Miljøagentur og EU angående EMF i stedet for at vente til der bliver decideret EU lovgivning på området?
- Hvorfor ignorerer SST, f.eks. Østrigs lægeforenings vejledning og procedurer ved diagnosticering af EHS[9]?

Vores medlemmer er syge, og de kan ikke få forståelse hos læger og sagsbehandlere, (som forsøger at behandle dem som psykisk syge). Vi har behov for forståelse og handling, for anerkendelse af EHS som en fysisk, miljøbetinget lidelse og for beskyttelse. Vi finder det dybt uansvarligt at vi som privat patientforening skal sidde alene tilbage med et stort personansvar for et eksponentielt stigende antal syge danskere.

Vi vil gerne kontaktes nu, SU. En kopi sendes til formanden, næsteformand og til hvert medlem af Folketingets Sundheds- og Forebyggelsesudvalg.

Venlig hilsen
Silvana Lund,

EHS Foreningen, www.ehsf.dk
EHS Foreningen af el-overfølsomme, en privat og uafhængig forening, som støtter EHS-ramte.
Flere og flere får EHS: Electro Hyper Sensitivity, især pga. det stigende strålingsniveau fra trådløst udstyr.
Mange har milde EHS-symptomer uden at vide det.
Se information på www.ehsf.dk
Mail: kontakt@ehsf.dk

[9] Link til den danske oversættelse af den Østrigske Lægeforeningens vejledning: http://www.ehsf.dk/dokumenter/10032-Den-Oestrigske-laegeforening-EHS-diagnosticering-dansk-oversaettelse-af-www.ehsf.dk.pdf

EHS Foreningen af el-overfølsomme
www.ehsf.dk kontakt@ehsf.dk

Oue, d. 28. maj 2013

Til Folketingets Sundheds- og Forebyggelsesudvalgs medlem

Ref.: Sundhedsstyrelsen

Sundheds-og Forebyggelsesudvalget

Kære …

Jeg skriver til dig på vegne af patientforeningen, EHS Foreningen af el-overfølsomme. EHS betyder Electro Hyper Sensitivity.

Foreningen[1] har bl.a. som formål at hjælpe vores syge medlemmer. En del er meget syge, nogle 100% invaliderede, og bare en banal begivenhed som at gå en tur i supermarkedet er en næsten umulig opgave for dem pga. den store mængde elektromagnetisme, der findes overalt - på gaden, i den offentlige transport, i butikker osv. Andre af vores medlemmer kan leve nogenlunde normalt ved at begrænse deres eksponering for elektromagnetiske felter, EMF.

Vores medlemmer er ligesom dem med andre former for overfølsomhed. Hvis folk med overfølsomhed overfor nødder fjerner nødderne fra deres kost, kan de leve et ganske normalt liv. Men **der** slutter sammenligningen, idet vi ikke kan fjerne strålingen fra f.eks. andre folks mobiltelefoner, naboernes trådløse udstyr eller de mange antennemaster, der skyder op alle steder.

Ifølge andre landes statistikker anslås det, at 3- 16 % af befolkningen lider af EHS, og antallet vil stige i takt med, at vi, alle, bliver stadigt mere eksponerede for menneskeskabte elektromagnetiske felter. Mange ved ikke, at deres symptomer kan skyldes EMF.

De nuværende grænseværdier for EMF er alt for høje, samtidig med at de kun beskytter mod EMF skader forårsaget af varmepåvirkning (grænseværdien stammer fra militærindustriens udstyr som f.eks. radar). Den beskytter ikke mod langtidspåvirknings skader, som opstår langt under de nuværende grænseværdier.

I årevis har tusinder af videnskabelige undersøgelser bekræftet **langtidspåvirknings skader**, som bl.a. oxidativ stress på celle niveau, lækage i blod-hjerne barrieren, DNA skader og hormonforstyrrelser. Konsekvenserne er bl.a. ADHD, kræft, søvnforstyrrelser, hovedpine, migræne, depression, sterilitet, **men også EHS**. Se Bioinitiative rapporten (fodnote 3).

Ca. 90 % af undersøgelserne lavet af forskere der er uafhængige af industrien viser, at EMF er skadelig, mens ca. 90 % af dem der stammer fra forskere med tilknytning til industrien ikke påviser skader.

[1] Vores hjemmeside er: http://www.ehsf.dk/ Her kan du læse mere om bl.a. EHS symptomer.

Vi har tidligere henvendt os til Sundhedsstyrelsen og til Erhvervsstyrelsen for at bede dem følge Europarådets anbefalinger[2] om at anvende forsigtighedsprincippet og følge anbefalingerne i Bioinitiative rapporten 2012[3]. Hver gang får vi "standard svaret" om, at de: "*vurderer ud fra den nuværende viden, at der ikke er en generel trussel mod folkesundheden ved radiofrekvente elektromagnetiske felter (RF EMF) i samfundet, så længe de fastsatte grænseværdier og anbefalinger overholdes*".

Dette gør os målløse og yderst bekymrede, da **der ikke mangler beviser for skadevirkninger af EMF**. Enten pga. dårlig rådgivning eller ignorance, benægter Sundhedsstyrelsen virkeligheden, sætter vores (og alles) sundhed på spil, fører sundhedssystemet og jer, politikere, bag lyset og gør vores medlemmer mere og mere syge. Sundhedsstyrelsen har endda givet grønt lys for, at vi, der er blevet syge af miljøforurening (elektrosmog) bliver behandlet som sindslidende.

Andre lande, f.eks. Rusland og Italien har valgt en meget lavere grænseværdi for EMF. Belgien vil forbyde at sælge og reklamere for mobiltelefoner til børn, Østrig har lavet retningslinjer for læger til diagnosticering af EHS, og Sverige har anerkendt EHS som en fysisk lidelse.

Jeg beder dig konfrontere Sundhedsstyrelsen med sandheden om EMF skadevirkningen. Anerkendelse af denne skadevirkning og implementering af foranstaltninger i forbindelse hermed vil give os, EHS-patienter, et langt mere tåleligt liv og vil ikke mindst spare staten for mange udgifter.

EHS Foreningen af el-overfølsomme er til rådighed med yderligere oplysninger. SU.

Venlig hilsen
Silvana Lund

EHS Foreningen af el-overfølsomme,
en privat og uafhængig forening, som støtter EHS-ramte.
Flere og flere får EHS: Electro Hyper Sensitivity, især pga. det stigende strålingsniveau fra trådløst udstyr.
Mange har milde EHS-symptomer uden at vide det.
Se information på www.ehsf.dk
Mail: kontakt@ehsf.dk

[2] Europarådets resolution 1815 fra 6. maj 2011: "The potential danger of electromagnetic fields and their effect on the environment" http://assembly.coe.int/mainf.asp?link=/documents/adoptedtext/ta11/eres1815.htm
[3] Link til Bioinitiativ Rapport 2012: http://www.bioinitiative.org/

International Agency for Research on Cancer

World Health Organization

PRESS RELEASE
N° 208

31 May 2011

IARC CLASSIFIES RADIOFREQUENCY ELECTROMAGNETIC FIELDS AS POSSIBLY CARCINOGENIC TO HUMANS

Lyon, France, May 31, 2011 -- The WHO/International Agency for Research on Cancer (IARC) has classified radiofrequency electromagnetic fields as **possibly carcinogenic to humans (Group 2B)**, based on an increased risk for **glioma**, a malignant type of brain cancer[1], associated with wireless phone use.

Background

Over the last few years, there has been mounting concern about the possibility of adverse health effects resulting from exposure to radiofrequency electromagnetic fields, such as those emitted by wireless communication devices. The number of mobile phone subscriptions is estimated at **5 billion globally**.

From **May 24–31 2011, a Working Group of 31 scientists from 14 countries has been meeting at IARC in Lyon, France, to assess the potential carcinogenic hazards from exposure to radiofrequency electromagnetic fields**. These assessments will be published as Volume 102 of the IARC *Monographs*, which will be the fifth volume in this series to focus on physical agents, after **Volume 55** (Solar Radiation), **Volume 75** and **Volume 78** on ionizing radiation (X-rays, gamma-rays, neutrons, radio-nuclides), and **Volume 80 on non-ionizing radiation (extremely low-frequency electromagnetic fields)**.

The IARC Monograph Working Group discussed the possibility that these exposures might induce long-term health effects, in particular an increased risk for cancer. This has relevance for public health, particularly for users of mobile phones, as the number of users is large and growing, particularly among young adults and children.

The IARC Monograph Working Group discussed and evaluated the available literature on the following exposure categories involving radiofrequency electromagnetic fields:

- occupational exposures to radar and to microwaves;
- environmental exposures associated with transmission of signals for radio, television and wireless telecommunication; and
- personal exposures associated with the use of wireless telephones.

International experts shared the complex task of tackling the **exposure data**, **the studies of cancer in humans**, the **studies of cancer in experimental animals**, and the **mechanistic and other relevant data**.

---

[1] **237 913 new cases of brain cancers** (all types combined) occurred around the world in 2008 (gliomas represent 2/3 of these). Source: **Globocan 2008**

IARC CLASSIFIES RADIOFREQUENCY ELECTROMAGNETIC FIELDS AS POSSIBLY CARCINOGENIC TO HUMANS

Results

The evidence was reviewed critically, and overall evaluated as being *limited*[2] among users of wireless telephones for glioma and acoustic neuroma, and *inadequate*[3] to draw conclusions for other types of cancers. The evidence from the occupational and environmental exposures mentioned above was similarly judged inadequate. The Working Group did not quantitate the risk; however, one study of past cell phone use (up to the year 2004), showed a 40% increased risk for gliomas in the highest category of heavy users (reported average: 30 minutes per day over a 10-year period).

Conclusions

Dr Jonathan Samet (University of Southern California, USA), overall Chairman of the Working Group, indicated that "the evidence, while still accumulating, is strong enough to support a conclusion and the **2B classification**. The conclusion means that there could be some risk, and therefore we need to keep a close watch for a link between cell phones and cancer risk."

"Given the potential consequences for public health of this classification and findings," said IARC Director Christopher Wild, "it is important that additional research be conducted into the long-term, heavy use of mobile phones. Pending the availability of such information, it is important to take pragmatic measures to reduce exposure such as hands-free devices or texting. "

The Working Group considered hundreds of scientific articles; the complete list will be published in the Monograph. It is noteworthy to mention that several recent in-press scientific articles[4] resulting from the **Interphone study** were made available to the working group shortly before it was due to convene, reflecting their acceptance for publication at that time, and were included in the evaluation.

A concise report summarizing the main conclusions of the IARC Working Group and the evaluations of the carcinogenic hazard from radiofrequency electromagnetic fields (including the use of mobile telephones) will be published in **The Lancet Oncology in its July 1 issue, and in a few days online**.

---

[2] '***Limited evidence of carcinogenicity***': A positive association has been observed between exposure to the agent and cancer for which a causal interpretation is considered by the Working Group to be credible, but chance, bias or confounding could not be ruled out with reasonable confidence.

[3] '***Inadequate evidence of carcinogenicity***': The available studies are of insufficient quality, consistency or statistical power to permit a conclusion regarding the presence or absence of a causal association between exposure and cancer, or no data on cancer in humans are available.

[4] a. 'Acoustic neuroma risk in relation to mobile telephone use: results of the INTERPHONE international case-control study' (the Interphone Study Group, in Cancer Epidemiology, *in press*)
b. 'Estimation of RF energy absorbed in the brain from mobile phones in the Interphone study' (Cardis et al., Occupational and Environmental Medicine, *in press*)
c. 'Risk of brain tumours in relation to estimated RF dose from mobile phones – results from five Interphone countries' (Cardis et al., Occupational and Environmental Medicine, *in press*)
d. 'Location of Gliomas in Relation to Mobile Telephone Use: A Case-Case and Case-Specular Analysis' (American Journal of Epidemiology, May 24, 2011. [Epub ahead of print].

IARC, 150 Cours Albert Thomas, 69372 Lyon CEDEX 08, France - Tel: +33 (0)4 72 73 84 85 - Fax: +33 (0)4 72 73 85 75

IARC CLASSIFIES RADIOFREQUENCY ELECTROMAGNETIC FIELDS AS POSSIBLY CARCINOGENIC TO HUMANS

For more information, please contact
Dr Kurt Straif, IARC Monographs Section, at +33 472 738 511, or straif@iarc.fr; Dr Robert Baan, IARC Monographs Section, at +33 472 738 659, or baan@iarc.fr; or Nicolas Gaudin, IARC Communications Group, at com@iarc.fr (+33 472 738 478)
Link to the **audio file** posted shortly after the briefing:
http://terrance.who.int/mediacentre/audio/press_briefings/

About IARC

The International Agency for Research on Cancer (IARC) is part of the World Health Organization. Its mission is to coordinate and conduct research on the causes of human cancer, the mechanisms of carcinogenesis, and to develop scientific strategies for cancer control. The Agency is involved in both epidemiological and laboratory research and disseminates scientific information through publications, meetings, courses, and fellowships.

If you wish your name to be removed from our press release e-mailing list, please write to com@iarc.fr.

Nicolas Gaudin, Ph.D.
Head, IARC Communications
International Agency for Research on Cancer
World Health Organization
150, cours Albert-Thomas
69008 Lyon
France

Email com@iarc.fr
http://www.iarc.fr/

IARC CLASSIFIES RADIOFREQUENCY ELECTROMAGNETIC FIELDS AS POSSIBLY CARCINOGENIC TO HUMANS

ABOUT THE IARC MONOGRAPHS

What are the IARC Monographs?

The *IARC Monographs* identify environmental factors that can increase the risk of human cancer. These include chemicals, complex mixtures, occupational exposures, physical and biological agents, and lifestyle factors. National health agencies use this information as scientific support for their actions to prevent exposure to potential carcinogens. Interdisciplinary working groups of expert scientists review the published studies and evaluate the weight of the evidence that an agent can increase the risk of cancer. The principles, procedures, and scientific criteria that guide the evaluations are described in the **Preamble** to the IARC Monographs.

Since 1971, more than 900 agents have been evaluated, of which approximately 400 have been identified as **carcinogenic or potentially carcinogenic** to humans.

Definitions

Group 1: The agent is *carcinogenic to humans*.

This category is used when there is *sufficient evidence of carcinogenicity* in humans. Exceptionally, an agent may be placed in this category when evidence of carcinogenicity in humans is less than *sufficient* but there is *sufficient evidence of carcinogenicity* in experimental animals and strong evidence in exposed humans that the agent acts through a relevant mechanism of carcinogenicity.

Group 2.

This category includes agents for which, at one extreme, the degree of evidence of carcinogenicity in humans is almost *sufficient*, as well as those for which, at the other extreme, there are no human data but for which there is evidence of carcinogenicity in experimental animals. Agents are assigned to either Group 2A (*probably carcinogenic to humans*) or Group 2B (*possibly carcinogenic to humans*) on the basis of epidemiological and experimental evidence of carcinogenicity and mechanistic and other relevant data. The terms *probably carcinogenic* and *possibly carcinogenic* have no quantitative significance and are used simply as descriptors of different levels of evidence of human carcinogenicity, with *probably carcinogenic* signifying a higher level of evidence than *possibly carcinogenic.*

Group 2A: The agent is *probably carcinogenic to humans*.

This category is used when there is *limited evidence of carcinogenicity* in humans and *sufficient evidence of carcinogenicity* in experimental animals. In some cases, an agent may be classified in this category when there is *inadequate evidence of carcinogenicity* in humans and *sufficient evidence of carcinogenicity* in experimental animals and strong evidence that the carcinogenesis is mediated by a mechanism that also operates in humans. Exceptionally, an agent may be classified in this category solely on the basis of *limited evidence of carcinogenicity* in humans. An agent may be assigned to this category if it clearly belongs, based on mechanistic considerations, to a class of agents for which one or more members have been classified in Group 1 or Group 2A.

IARC, 150 Cours Albert Thomas, 69372 Lyon CEDEX 08, France - Tel: +33 (0)4 72 73 84 85 - Fax: +33 (0)4 72 73 85 75

Group 2B: The agent is *possibly carcinogenic to humans*.

This category is used for agents for which there is *limited evidence of carcinogenicity* in humans and less than *sufficient evidence of carcinogenicity* in experimental animals. It may also be used when there is *inadequate evidence of carcinogenicity* in humans but there is *sufficient evidence of carcinogenicity* in experimental animals. In some instances, an agent for which there is *inadequate evidence of carcinogenicity* in humans and less than *sufficient evidence of carcinogenicity* in experimental animals together with supporting evidence from mechanistic and other relevant data may be placed in this group. An agent may be classified in this category solely on the basis of strong evidence from mechanistic and other relevant data.

Group 3: The agent is *not classifiable as to its carcinogenicity to humans*.

This category is used most commonly for agents for which the evidence of carcinogenicity is *inadequate* in humans and *inadequate* or *limited* in experimental animals.

Exceptionally, agents for which the evidence of carcinogenicity is *inadequate* in humans but *sufficient* in experimental animals may be placed in this category when there is strong evidence that the mechanism of carcinogenicity in experimental animals does not operate in humans.

Agents that do not fall into any other group are also placed in this category.

An evaluation in Group 3 is not a determination of non-carcinogenicity or overall safety. It often means that further research is needed, especially when exposures are widespread or the cancer data are consistent with differing interpretations.

Group 4: The agent is probably not carcinogenic to humans.

This category is used for agents for which there is *evidence suggesting lack of carcinogenicity* in humans and in experimental animals. In some instances, agents for which there is *inadequate evidence of carcinogenicity* in humans but *evidence suggesting lack of carcinogenicity* in experimental animals, consistently and strongly supported by a broad range of mechanistic and other relevant data, may be classified in this group.

Definitions of evidence, as used in IARC Monographs for studies in humans

The evidence relevant to carcinogenicity from studies in humans is classified into one of the following categories:

Sufficient evidence of carcinogenicity: The Working Group considers that a causal relationship has been established between exposure to the agent and human cancer. That is, a positive relationship has been observed between the exposure and cancer in studies in which chance, bias and confounding could be ruled out with reasonable confidence. A statement that there is *sufficient evidence* is followed by a separate sentence that identifies the target organ(s) or tissue(s) where an increased risk of cancer was observed in humans. Identification of a specific target organ or tissue does not preclude the possibility that the agent may cause cancer at other sites.

IARC, 150 Cours Albert Thomas, 69372 Lyon CEDEX 08, France - Tel: +33 (0)4 72 73 84 85 - Fax: +33 (0)4 72 73 85 75

Limited evidence of carcinogenicity: A positive association has been observed between exposure to the agent and cancer for which a causal interpretation is considered by the Working Group to be credible, but chance, bias or confounding could not be ruled out with reasonable confidence.

Inadequate evidence of carcinogenicity: The available studies are of insufficient quality, consistency or statistical power to permit a conclusion regarding the presence or absence of a causal association between exposure and cancer, or no data on cancer in humans are available.

Evidence suggesting lack of carcinogenicity: There are several adequate studies covering the full range of levels of exposure that humans are known to encounter, which are mutually consistent in not showing a positive association between exposure to the agent and any studied cancer at any observed level of exposure. The results from these studies alone or combined should have narrow confidence intervals with an upper limit close to the null value (e.g. a relative risk of 1.0). Bias and confounding should be ruled out with reasonable confidence, and the studies should have an adequate length of follow-up. A conclusion of *evidence suggesting lack of carcinogenicity* is inevitably limited to the cancer sites, conditions and levels of exposure, and length of observation covered by the available studies. In addition, the possibility of a very small risk at the levels of exposure studied can never be excluded.

In some instances, the above categories may be used to classify the degree of evidence related to carcinogenicity in specific organs or tissues.

IARC, 150 Cours Albert Thomas, 69372 Lyon CEDEX 08, France - Tel: +33 (0)4 72 73 84 85 - Fax: +33 (0)4 72 73 85 75