

# CORA-Description of the IARC-Report 2013

## 1. About

<b>Source</b>
IARC (International Agency for Research on Cancer). Non-ionizing radiation, part 2: radiofrequency electromagnetic fields. IARC Monographs, vol. 102, 2013.
<b>Link</b>
<a href="https://monographs.iarc.fr/ENG/Monographs/vol102/mono102.pdf">https://monographs.iarc.fr/ENG/Monographs/vol102/mono102.pdf</a>
<b>Supporting information</b>
<a href="http://monographs.iarc.fr/ENG/Preamble/CurrentPreamble.pdf">http://monographs.iarc.fr/ENG/Preamble/CurrentPreamble.pdf</a>

## 2. Content and Mandate

<b>Objectives</b>
To critically review and evaluate, with the help of international Working Groups of experts, the scientific evidence on the carcinogenicity of RF EMF (hazard assessment, not risk assessment).
<b>EMF spectrum covered</b>
30 kHz – 300 GHz
<b>Status of report and authorship</b>
Document based on the evaluation of an independent interdisciplinary Working Group appointed by IARC.
<b>Funding</b>
No funding
<b>Accountability</b>
IARC
<b>Summary</b>
Scientific evaluation of (peer-reviewed) research about cancerogenic effects of RF EMF by an independent expert group appointed by IARC.

## 3. Authorship

<b>Selection of Members</b>
Working Group members selected by IARC on the basis of (i) required expertise, (ii) absence of real or apparent conflicts of interests, (iii) demographic considerations and balance of scientific views.
<b>Composition (institutional)</b>
Working Group: 30 experts in EMF cancer research. Involved to different degrees: invited specialists (2), representatives of agencies (6), observers (5), IARC (30).
<b>Composition (expertise)</b>
All required expertise available in the Working Group.
<b>Impartiality</b>
All candidates were screened for conflicts of interests. In case of real or potential conflicts, candidates are not included into the final group.
<b>Disclosure</b>
Full disclosure of names and affiliations.
<b>Summary</b>
Members are appointed, rules of procedure assure impartiality. Required expertise for the mandated task is available.

## 4. Assessment Process

<b>Literature search</b>
Types of study considered described. Selection criteria for inclusion or exclusion of papers not explained.
<b>Quality assurance</b>
Yes; bias, confounding and chance of study findings are taken into account.
<b>Weighing of evidence</b>
Formal criteria for categorising RF EMF in one of 5 carcinogenicity groups, taking into account evidence from animal studies, human studies and mechanistic studies.
<b>Consultation activities</b>
No consultation process
<b>Consensus finding</b>
Yes. In case of significant differences among WG members, minority opinions are expressed.
<b>Summary</b>
Standard IARC procedure for literature selection and hazard evaluation. Inclusion/Exclusion criteria not described. Very careful and extensive hazard assessment process.

## 5. Communication

<b>Differentiation between biological and adverse health effects</b>
Yes
<b>Unbiased descriptions</b>
Yes. The report evaluates all research outcomes of the included studies and identifies uncertainties
<b>Evidence-based conclusions</b>
Yes.
<b>Plain language summary</b>
The "Summary" of the report is quite technical, the "Evaluation" in plain language. For laypersons not familiar with the technical wording of IARC, the evaluation scheme (levels of carcinogenicity) remains vague.
<b>Unbiased summary</b>
Yes
<b>Summary</b>
Balanced description on the analysed scientific data. Identification of inconclusive data and evidence. The overall evaluation / rating for non-specialists difficult to fully understand.