

Compilation of measures and recommendations by governments and international organisations and court rulings on health effects caused by electromagnetic (EM) radiation from wireless communication (smartphones, WiFi, cell towers, etc.)  
(with hyperlinks to informative and original publications)

## 2017

- 28 Nov., [USA](#) : In 2017, Massachusetts introduced seven bills to address wireless radiation and public Health, for protection of the population.
- 11 Nov., [Cyprus/Vienna](#) : The Cyprus Medical Association, the Vienna Austrian Medical Chamber and the Cyprus National Committee on Environment and Children's Health have signed the Nicosia Declaration on electromagnetic and radiofrequency radiation and have issued a [new position paper](#) and [16 practical steps](#) to reduce exposure to cell phones and wireless radiation.
- 11 Oct., [USA](#) : The city of Berkeley won a decision in the 'Federal Appeals Court' today. The 9th Circuit Court of Appeals refused to reconsider its April decision to uphold the [Berkeley ordinance](#) that requires cell phone retailers to warn customers about possible radiation exposure.
- 14 Aug., [French Polynesia](#) : Enacts New Law and Launches Major Public Awareness Campaign to Reduce Exposure To Cell Phones, Wi-Fi and Electromagnetic Radiation.
- 10 July, [Cyprus](#) : WiFi has been removed from elementary schools and initiatives to educate children and families about health hazards from cell phones and wireless radiation are made, including brochures and videos.
- 24 May, [Belgium](#) : A well documented proposal of a resolution to recognize electrohypersensitivity in Belgium has been submitted to the Senate by three of its members.
- 24 April, [Italy](#) : The court in Florence ordered INAIL (the Italian Workcover) to pay a lifetime of compensation to the injured worker suffering from an acoustic neuroma: he used the phone for 2-3 hours a day for 10 years. Expert testimony speaks of "high probability between cell phone use and malignant disease".
- 21 April, [USA](#) : The 'Federal Appeals Court' confirms the 'City of Berkeley right to know ordinance' which requires cellphone retailers in the city to provide consumers with the following notification:  
"To assure safety, the Federal Government requires that cell phones meet radiofrequency (RF) exposure guidelines. If you carry or use your phone in a pants or shirt pocket or tucked into a bra when the phone is ON and connected to a wireless network, you may exceed the federal guidelines for exposure to RF radiation. Refer to the instructions in your phone or user manual for information about how to use your phone safely."
- 12 April, [India](#) : The Supreme Court ordered deactivation of mobile tower after a cancer-stricken man said the radiation was responsible for his ill health.
- 11 April, [Italy](#) : The Court in Ivrea ruled that excessive, work-related use of a mobile phone caused an executive to develop a benign brain tumour. The plaintiff, who testified that his work duties obliged him to use his mobile for three to four hours of each working day for 15 years, was awarded a state-funded pension.
- 1 April, [Greece](#) : The 'Athens Medical Association (AMA)' publishes a list of 16 rules to reduce health risks from exposure to wireless radiation.
- 22/29 March, [Bangladesh](#) : According to a Government Report the radiation by a cell tower of a mobile operator in Bangladesh is harmful for public health. The High Court ordered the Telecommunication Regulatory Commission to take steps to reduce the excessive radiation of the mobile tower.
- 22 March, [USA](#) : 'Five Cell Phone & Wireless Safety Bills introduced in Massachusetts Legislature', among these one to warn the population about the minimum separation distance between cell phones and the person's body, another to reduce or eliminate children's EMF (including WiFi) exposure in schools and one to give residents the right to keep non-RF-emitting water, gas and electrical meters instead of "smart" utility meters without having to pay extra fees.
- 10 March, [Russia](#) : The 'Russian National Committee on Non-Ionizing Radiation Protection (RNCNIRP)' warns in a letter to the WHO for the unbalanced WHO RF Working group, which consists mainly of

- present and past ICNIRP members - who do not recognize the non-thermal RF effect - and states that balancing of the evaluation group will be a key factor to achieve a credible conclusion.
- 6 March, [France](#) : Paris mayor Anne Hidalgo has reached an agreement with France's four main mobile network operators aimed at introducing stricter network radiation norms. The EMF (electro-magnetic frequency) exposure limit is to be lowered to 5V/m from the current 7V/m for indoor spaces, representing a 30 percent reduction at the frequency reference of 900 MHz.
- 6 March, [USA](#) : After reviewing new and growing evidence on health risks of wireless radiation, the 'Maryland State Advisory Council' recommends reducing school wireless, by providing wired-rather than wireless-internet connections, to protect children.
- 5 March, [USA](#) : A once-secret document detailing links between cell phones and brain cancer has been released by order of a California court. Entitled, "Cell Phones and Health," the document was demanded in a lawsuit filed by Joel Moskowitz, Ph.D., director of the Center for Family and Community Health at UC Berkeley's School of Public Health.
- 31 Jan., [Cyprus](#) : The Minister of 'Education and Culture' issues a new Decree to minimize wireless radiation exposure to children in schools. Wireless is to be removed from all Cyprus kindergartens, wireless installations are halted in elementary schools and will be limited to administrative offices.
- 27 Jan., [Cyprus](#) : The Cyprus Government's National Committee on "Children's Environment and Health" advises pregnant woman in a video to: "Protect the foetus from the radiation of cell phones, WiFi and other wireless devices/connections".

## 2016

- 8 Dec., [Switzerland](#) : The Swiss Council of States has voted against a motion to raise the upper limit on radiation transmissions from cell towers. This limit, applicable for indoor living and working places, lies a factor of 100 below the ICNIRP limit which does not make a distinction between indoor and outdoor places.
- 2 Aug., [Spain](#) : Electrohypersensitivity of a telecommunications engineer, resulting in inability to continue work in his profession and therefore being entitled to a disability benefit, recognized by the High Court of Madrid.
- 25 July, [France](#) : A law to reduce the RF radiation exposure and to apply the precautionary principle adopted in the Senat after being adopted earlier in the Assemblée Nationale. The law bans the use of WiFi in nurseries and daycare centres, bans advertisements for mobile phones aimed at children and requires disabling access points/routers in primary schools when not used for lessons. Manuals of wireless apparatuses have to be provided with instructions how to shut down the wireless functions.
- 8 July, [France](#) : The French 'Agence nationale de sécurité sanitaire' (ANSES) published a scientific report 'Exposition des enfants aux radiofréquences : pour un usage modéré et encadré des technologies sans-fil' with recommendations to reduce exposure to wireless radiation for children and states that children are more vulnerable to this radiation than adults.
- 10 June, [USA](#) : The 'American Academy of Pediatrics', the largest group of childrens doctors in the USA, issued new recommendations to reduce exposure to wireless radiation. Reference was made to the US National Toxicology Program (NTP) study in which it was found that exposure to wireless radiation significantly increases the prevalence of highly malignant cardiac and brain tumors in rodents.
- 6 June, [Germany](#) : The German 'Bundesamt für Strahlenschutz' published a new law to reduce the exposure to low-frequency electric and magnetic fields as much as possible. This should be done both outdoor (high-tension lines) as indoor (electrical appliances).
- 22 April, [Poland](#) : The Polish Ministry of Digitization announced its preparation of an act on the control of the effects of electromagnetic radiation from radiocommunications devices on human life and health.
- 20 April, [Israel](#) : Haifa's mayor Yona Yahav, in coordination with the head of education department, Ilana Truck, ordered to immediately disconnect WiFi in educational system until a thorough examination of the subject is made. At the same time, Yahav guides to advance the installation of wired safer system.
- 13 April, [Austria](#) : Resolution to include health aspects in the building of cell towers unanimously adopted by the 'Kärntner Landesregierung'. Restrictive measures were already adopted earlier in the Salzburg and Wien regions.

- 28 March, [Argentina](#) : In the 'Chamber of Deputies' a bill is presented to prevent, reduce, control and sanction electromagnetic pollution. Among its most important aspects, the bill provides that irradiating devices should be installed at a minimum distance of 100 meters from inhabited areas and limits maximum radiation levels to 1000  $\mu\text{W}/\text{m}^2$  for digital modulation signals, a factor of 10,000 lower than the maximum radiation levels in most Western countries, including the USA and the Netherlands.
- 24 March, [Germany](#) : The 'Bundesamt für Strahlenschutz (BfS)' states that there are uncertainties with regard to the possible health risks associated with long-term use of hand-held phones. To reduce these risks the Bfs publishes a detailed list of recommendations to minimize the radiation exposure.
- 11 Jan., [Spain](#) : First Municipal Government of the City of Tarragona adopts life saving plan for people with central sensitivity syndromes, especially for those who have MCS and/or EHS. The plan includes a housing protocol (white zones free of electromagnetic waves and white spaces in municipal buildings).
- 9 Jan., [Philippines](#) : Telecom firms ordered to shut down cell towers. The main reasons given are the health hazards posed to the residents, considering that there are a number of cancer victims, a number of them already died and there are still many who are sick.
- 4 Jan., [Austria](#) : The 'Wiener Ärztekammer' (Vienna medical authorities) publishes an updated version of a brochure with ten recommendations to minimize the radiation exposure from mobile phones.
- 3 Jan., [Cyprus](#) : The 'Cyprus National Committee on Environment and Children's Health', a Government Committee, brings out a video with an advice to reduce 'children's exposure to wireless'. Reference is made to the WHO classification of the RF radiation as 'Possibly Human Carcinogen' and it is stated that this radiation could lead to altering the development and function of the brain, the reproductive system and effect embryonic and child development, impacting our bodies at the cellular level, even our DNA, impact attention spans, increase anxiety and lead to other neurological problems.

## 2015

- 2 Oct. [USA](#) : The 'Federal District Court' allows the 'City of Berkeley' to implement the 'cellphone right to know ordinance', which requires mobile phone retailers to provide consumers with a notice of the FCC guidelines on cellphone use. This notice states that the federal guidelines for exposure to RF radiation may be exceeded when one carries the phone in a pants or shirt pocket when the phone is on.
- 25 Aug., [France](#) : Electrosensitivity of a female journalist is officially recognised as a serious handicap (85% incapability to work) by the '[Tribunal du Contentieux de L'Incapacité de Toulouse](#)'. For two years the state must pay her an unemployment allowance.
- 10 July, [Spain](#) : The 'Vallisoletana Association of People Affected by mobile phone masts' (AVAATE) reports on conflicts of interest between the members of the 'International Commission on Non-Ionizing Radiation Protection' (ICNIRP) and the telecom industry. Despite these conflicts of interest and despite the private character of the ICNIRP, the WHO still relies almost exclusively on the ICNIRP in her judgment on the possible health hazards of electromagnetic fields (EMF).
- 27 June, [USA](#) : A Harvard University report describes how the 'Federal Communications Commission' (FCC) is dominated by the (telecom) industries it presumably regulates.
- 17 June, [Canada](#) : The 'Standing Committee on Health' of the 'Parliament of Canada' asks for protection of vulnerable populations against the radiation of wireless communication and comes with a list of [twelve recommendations](#) for research and actions in this area.
- 10 June, [Italy](#) : Parliament of South Tyrol reconfirms Precautionary Principle and mandates the state government:
  - to replace existing wireless networks whenever possible with networks that emit less radiation at schools, preschools, hospitals, nursing homes, and other public facilities...
  - to start an education and awareness campaign that informs about possible health risks, especially regarding the unborn, infants, children, and adolescents and that develops guidelines for a safer use of cell phones, smartphones, and Wi-Fi.
- 10 Febr., [France](#) : A law aimed at reduction of RF radiation exposure and application of the precautionary principle is adopted in the '[Assemblée Nationale](#)' with modifications proposed by the '[Sénat](#)'. The law bans the use of WiFi in nurseries and daycare centres and requires disabling access points/routers in primary schools when not used for lessons. Furthermore, advertisements for mobile phones must

- include a recommendation of devices (such as earphones) to reduce exposure to the head and all wireless devices must contain clear instructions on how to disable their wireless functionality.
- 2 Febr., [Brazil](#) : NOKIA should pay R \$ 250.000 plus annuity corresponding to 50% of final salary to a 37 year old cell-tower worker who had rare type of cancer. Three of his co-workers developed the same type of cancer and died aged 28, 39 and 45 years.
- 28 Jan., [Taiwan](#) : A law adopted which limits the use of 'electronic products' like video games and televisions by children under 18, while children under the age of two should be completely banned from using electronic devices. Parents who break the rules can be hit with fines of up to £1,000.
- 23 Jan., Canada : [Bill C-648](#) proposed which requires manufacturers of wireless devices to place health warning labels on their packaging.
- 21 Jan., [Europe](#) : In the 'European Economic and Social Committee' (EESC) of the 'European Union' two reports on 'Electromagnetic hypersensitivity' (EHS) were discussed. In the first report (['opinion'](#)) the existence of EHS is fully recognized as well as its relation to the exposure to electromagnetic fields (EMF). In the second report (['counter-opinion'](#)) there is concern about and recognition of the prevalence of EHS, but a denial of the link to EMF. In a vote on this issue there were 136 votes in favor of the counter opinion, 110 against and 19 abstentions.

## 2014

- 24 Nov., [USA](#) : Maryland City Votes Unanimously To Alert Citizens to the Health Risks of Cell Phone/Wireless Radiation and To Oppose Cell Towers on School Grounds. City brochures will highlight manufacturers' fine print warnings of recommended separation between body and phone and encourage simple safety steps to reduce radiation exposure.
- October, [Austria](#) : The industrial and health organizations issue a new guideline for the building of celltowers. On basis of the precautionary principle the total radiation exposure of all sources combined should be less than 1 mW/m<sup>2</sup> (0,6 V/m), a factor of 10,000 below the ICNIRP recommendation accepted in most Western countries. In this new guideline the earlier recommendations by these organizations from 2012 are confirmed.
- 3 Oct., [The Netherlands](#) : The 'National Ombudsman' confirms that a worker with health problems through WiFi was not correctly treated by the UWV (governmental) insurance physician. Given the seriousness and duration of the symptoms and the regular consultations by the occupational physician, the UWV physician should have seen the complainant herself, which she had not done. Also, she had not listened to the complainant.
- 26 June, [France](#) : Tekst adopted by the 'Sénat' for better regulation of exposure of people to electromagnetic waves. The tekst bans advertising for tablets destined for children younger than 14 (with a fine of € 75.000), as was the case already for mobile phones. Advertisements for mobile phones without headsets are also forbidden and access points/routers in primary schools must be disabled when not used for lessons. The text also requests a report on electrohypersensitivity from the Government. ([English summary](#))
- 1 March, [Belgium](#) : The sale of mobile phones specially manufactured for children under 7 is prohibited. SAR values will have to be listed everywhere where mobile phones are sold, in stores as well as over the internet and a health warning should be added.
- 23 Jan., [France](#) : A law to reduce RF radiation exposure and to apply the precautionary principle is adopted in the 'Assemblée Nationale'. The law bans:
  - advertisements for tablets for children under 14 (as for mobile phones),
  - advertisements for mobile phones without 'headset',
  - WiFi in nurseries and daycare centers (children under 3).
For persons suffering from electrohypersensitivity (EHS) , the government will have to provide the Parliament with a report on 'the possibilities to create low radiation areas', as well as on 'their problems' in the workplace.

## 2013

- 15 Oct., [France](#) : The 'Agence nationale de sécurité sanitaire' (ANSES) publishes a list of recommendations to limit exposure to RF radiation, especially for children, and expresses concern about the impact of widespread adoption of 4G.
- 16 Sept., [India](#) : The 'Municipal Corporation of Greater Mumbai' proposes to ban cell towers on schools, colleges, hospitals and orphanages and to remove already existing cell towers on such buildings and nearby cell towers directed towards such buildings. Installing cell towers on buildings should only be allowed with 70% consent of the occupants.
- 1 Aug., [Israel](#) : The Ministry of Education bans WiFi from nursery class and restricts the use in classes with children up to 8 years.
- 18 July, [Israel](#) : The Supreme Court orders the Israeli Government to investigate how many children in Israel already suffer from EHS. The Government must submit the result of its investigation to the court by November 16, 2013.
- 2 July, [Austria](#): The 'Wiener Ärztekammer' warns the Austrian population in a brochure for the possible health risks of mobile phones. In the brochure there is a list with ten recommendations to minimize the radiation exposure.
- 14 June, [India](#) : In the wake of health risks posed by mobile phone towers, the Noida Authority has decided to relocate over 300 of such antennas from residential areas of the city. In this they are following the guidelines of the Allahabad High Court, which has ordered to shift all such towers from residential sectors to other places. In a 2010 sealing drive initiated by the authority, 200 towers were sealed from residential areas.
- 19 April, [World](#) : IARC monograph 102 published; confirms the classification of RF EMF from mobile phones, WiFi, etc. as possibly carcinogenic to humans (class 2B), because of the increased risk for glioma and acoustic neuroma .
- 18 March, [France](#) : The precautionary principle applied to Wi Fi in French schools [enshrined in law](#) . Wired connections should be used where possible, to protect children against radiation exposure.
- 1 March, [Israel](#) : Partner, one of the top 3 Israeli cell phone companies, will pay \$100,000 to a cancer victim that prosecuted Partner because the company did not warn agents cell phone use in shelter rooms (with reinforced concrete). The cancer victim is a law attorney who used 2 cellphones in his office since 2003. The attorney was diagnosed with lymphoma right above the left ear where he used to hold his phone when talking. The claim was issued at 2010 and was settled in an agreement between the victim and the cellphone company.
- 28 Febr., [Australia](#) : The 'Administrative Appeals Tribunal of Australia' has (in Australia for the first time) legally acknowledged that the health problems (nausea, disorientation, headaches and other complaints) of Dr Alexander McDonald have been caused by electromagnetic fields (EMF) and has decided that Comcare is liable to pay to Dr McDonald compensation.

## 2012

- 27 Nov., [India](#) : The Rajasthan High Court orders relocation, within two months, of mobile towers within 500 m of schools, hospitals, jails and playgrounds. The Court cites a central government report saying radiation causes cancer, brain tumour, digestive disorder and tachycardia and also cites that even the Supreme Court has held that the radiation is hazardous. Rajasthan is a part of India with a surface area larger than Italy and over 56,000,000 inhabitants.
- 12 Oct., [Italy](#) : The Supreme Court of Italy has affirmed a ruling granting worker's compensation to a businessman who developed a tumor after using a cell phone for 12 years. This is the first time that a high court - in any country - has ruled in favor a link between mobile phone radiation and tumor development. The Court condemned the 'Insurance Body for Work' (INAIL) to pay to M. I. the pension for occupational disease scheduled for disability 80%. The [Supreme Court](#) decided earlier that "radiofrequency emissions above 6 V/m represent a crime of "dangerous launching" punishable by Article 674 of the Italian Penal Code". RF emission up to 61 V/m (UMTS), which are considered to be safe in most Western countries, are apparently criminal and punishable by law in Italy.
- 13 Sept., [Germany](#) : Electrohypersensitivity (EHS) of a former German Army Radar-mechanic acknowledged as occupational disease by the 'Court of Appeal for Administrative Litigation' in German

- state Schleswig-Holstein. The Court rejects Governments 'no proof' claims and accepts testimony of independent scientists Von-Klitzing and Hecht.
- 19 June, [Russia](#) : Recommendations of the Russian National Committee on Non-Ionizing Radiation Protection (RNCNIRP) on the necessity to regulate strictly the use of Wi-Fi in kindergartens and schools and to use wired networks in schools and educational institutions, rather than a network using wireless broadband systems, including Wi-Fi.
- 13 June, [Chile](#) : The Government passed the 'Ley de Torres' or the Towers Act, the regulations governing the installation of cellular antennas for greater protection of their health effects on people. The power of antennas is strictly limited and citizens participate in the approval or denial for new towers at the local level.
- 6 May, [Austria](#) : A joint publication of the industrial and health organizations and insurance companies. On basis of the precautionary principle the total radiation exposure from cell towers should be lowered to less than  $1 \text{ mW/m}^2$  ( $0,6 \text{ V/m}$ ), a factor of 10,000 below the ICNIRP recommendation, accepted in most Western countries.
- 19 April, [The Netherlands](#) : 'Knowledge Note Electrosensitivity' on health complaints near sources of electromagnetic fields - meant in particular for health care workers and employers - from the 'Kennisplatform Elektromagnetische Velden' (advisory committee of the Government). The health complaints experienced by the electrosensitives are recognized to be real, and possibly serious. The complaints occur at exposures to levels of EMF far below the applicable limits. EMF are mentioned as one of the possible causes for the complaints.
- 18 March, [Israel](#) : Knesset backs bill requiring cell phones to bear health hazard warning. The warning label will read: 'Warning - the Health Ministry cautions that heavy use and carrying the device next to the body may increase the risk of cancer, especially among children.' In a later session of the Knesset on this topic (Jan. 2013), the bill was voted down, a victory from the telecom industry.
- 3 March, [Austria](#) : Guideline of the Austrian Medical Association (ÖAK) published for the diagnosis and treatment of EMF related health problems and illnesses (EMF syndrome). ([German text](#)). In this guideline an outdoor exposure limit of  $0,01 \text{ mW/m}^2$  is recommended, a factor of **one million** lower than the ICNIRP limit.

## 2001 - 2011

- 1 Sept. 2011, [Israel](#) : The Israeli ministry of education is going to limit the use of cell phones in schools and partially adopts the European Parliament resolution from 2009. Students will be able to talk on their cell phones only from special locations within the school area and the use of cell phones will be band during lessons.
- 31 May 2011, [World](#) : IARC-WHO classifies radiofrequency (RF) electromagnetic fields (from mobile phones, WiFi, etc.) as possibly carcinogenic to humans (class 2B), based on the increased risk for glioma, a malignant type of brain cancer. In a subsequent paper in the [Lancet Oncology](#), by the IARC specialists who decided about the 2B classification, it is stated that:  
*'when mobile phones are used by children, the average RF energy deposition is two times higher in the brain and up to ten times higher in the bone marrow of the skull, compared with mobile phone use by adults,'* implying a greater risk for children.
- 6 May 2011, Europe : Press Release and [Resolution 1815](#) of the Council of Europe (CoE) on the potential dangers of electromagnetic fields and their effect on the environment. The CoE recommends to take all reasonable measures to reduce exposure to electromagnetic fields, especially to radio frequencies from mobile phones, and particularly the exposure to children and young people who seem to be most at risk from head tumours. The CoE also asks the member states to pay particular attention to 'electrosensitive' persons suffering from a syndrome of intolerance to electromagnetic fields and introduce special measures to protect them, including the creation of wave-free areas not covered by the wireless network. The CoE further warns that waiting for high levels of scientific and clinical proof before taking action to prevent well-known risks can lead to very high health and economic costs, as was the case with asbestos, leaded petrol and tobacco.
- 24 July 2010, [Belgium](#) : De Brussel municipality Watersmaal-Bosvoorde distributes a colorful brochure

to inform their citizens about possible health problems caused by use of mobile (GSM) phones.

12 July 2010, [France](#) : French Parliament passes a law prohibiting advertising cell phones to children under 14; prohibits children up to age 14 from using cell phones in pre-schools and public schools; requires cell phones to be labeled with SAR values and recommends to use headsets.

2009/2010, [Austria](#) / [England](#): Studies of the insurance companies AUVA en Loyds lead to the conclusion that the risks to cover health damage caused by mobile communication technologies are too large. Claims in this field are therefore excluded from any liability coverage. The Austrian report states that the electromagnetic fields from mobile communications have an effect on: the central nervous system, the immune system and protein synthesis. That report also states that the radiation exposure limits based on thermal effects don't protect against health problems caused by these EMF.

14 Sept. 2009, [India](#): Bangalore: The Department of Collegiate Education has issued an official circular prohibiting use of mobile phones in all 656 government and private colleges across the State. This circular comes after the ban on use of mobile phones in most professional colleges. Mobile phones are carried into the campus should be muted. If it rings, the mobile phone will be confiscated.

2 April 2009, [Europe](#) : European Parliament (EP) resolution on health concerns associated with electromagnetic fields, including the recommendation to limit the exposure of the general public to these EMF and a statement that these may have adverse effects on human health. The EP is greatly concerned about the fact that insurance companies exclude coverage for the risks associated with EMF. The EP further calls on Member States to follow the example of Sweden and to recognise persons that suffer from electrohypersensitivity as being disabled so as to grant them adequate protection as well as equal opportunities;

4 Febr. 2009, [France](#) : The 'Versailles Court of Appeal' confirms a decree by the 'Crown Court of Nanterre' that a cell tower should be removed because of the stress it has caused to neighboring citizens and sentences the company 'Bouygues Telecom' to pay sums up to € 7000,- to families as compensation for the psychological distress caused to them.

14 April 2008, [Russia](#) : The 'Russian National Committee of Non-Ionizing Radiation Protection' (RNCNIRP) has accepted an important decision on the theme 'mobile communication and children's health'. According to the RNCNIRP, the potential risk for the children's health is very high, because:

- the absorption of the electromagnetic energy in a child's head is considerably higher than that in the head of an adult (children's brain has higher conductivity, smaller size, thin skull bones);
- children's organism has more sensitivity to the EMF, than the adult's;
- children's brain has higher sensitivity to the accumulation of the adverse effects under conditions of chronic exposure to the EMF;
- EMF affects the formation of the process of the higher nervous activity;
- today's children will spend essentially longer time using mobile phones, than today's adults will.

According to the RNCNIRP, the following health hazards are likely to be faced by the children mobile phone users in the nearest future: disruption of memory, decline of attention, diminishing learning and cognitive abilities, increased irritability, sleep problems, increase in sensitivity to the stress, increased epileptic readiness. Expected (possible) remote health risks: brain tumors, tumors of acoustical and vestibular nerves (in the age of 25-30 years), Alzheimer's disease, 'dementia', depressive syndrome, and other types of degeneration of the nervous structures of the brain.

30 Nov. 2007, [France](#) : Moratorium on WiFi in public libraries in Paris, including the [National library](#) and the Sorbonne, following health complaints by staff members, including headache, dizziness, uneasiness, and muscular pain due to the 2.45 GHz waves.

9 Sept. 2007, [Germany](#) : The Government (Bundestag) warns for the use of WLAN at work and at home and recommends the use of wired networks.

2006, [Sweden](#) : Electrohypersensitivity: officially recognized (since 2000) as a 'functional Impairment' due to an inaccessible environment. EHS persons have [the right](#) to legal protection and to get accessibility measures for free, as well as governmental subsidies and municipality economic support. They are not seen as patients. Eight [hospitals](#) provide facilities suitable for EHS patients, implying shielded low radiation rooms.

2005, [Austria](#) : The 'Wiener Ärztekammer' asks for a ban on the use of mobile phones by children and refers to the '[Reflex Report](#)' in which genotoxic effects caused by mobile phone radiation have been

demonstrated. The Public Health Department of the [Salzburg Region](#) warns for health complaints, headaches, concentration difficulty, restlessness, memory problems etc., caused by WLAN and gives the official advice not to use WLAN and DECT in Schools or Kindergardens.

2003, [Switzerland](#) : Patent application by telecom company Swisscom AG, describing a method and system for reduction of electrosmog in wireless local networks. In the application it is mentioned that: *'mobile radio communication can cause damage to genetic material, whereby both the DNA itself is damaged and the number of chromosomes changed. This mutation can consequently lead to increased cancer risk. In particular, it could also be shown that this destruction is not dependent upon temperature increases, i.e. is non-thermal.'*

2001, [World](#) : The 'International Agency for Research on Cancer' (IARC, sub-division of the WHO) classifies extreme low frequency (ELF) magnetic fields, such as from power transmission lines, electric wiring in buildings and electric appliances as possibly carcinogenic to humans (class 2B), based on consistent statistical associations of high level residential magnetic fields with a doubling of risk of childhood leukaemia.

## 1932 – 2000

1994, [USA](#) : Report on the biological effects of radiofrequency (RF) radiation from the 'Rome Laboratory Air Force Material Command'. From the report we quote:

*'Experimental evidence has shown that exposure to low intensity radiation can have a profound effect on biological processes. The nonthermal effects of RF/MW radiation exposure are becoming important measures of biological interaction with EM fields.'*

Reference is also made to the Soviet and Eastern European investigators who, and we quote:

*'have placed a great emphasis on the nonthermal effects of biological exposure to RF/MW radiation. They contend that electromagnetic interactions with the bioelectrical and biochemical functions of the body constitute a more serious health risk than effects from thermal heating.'*

1976, [USA](#) : Report on the biological effects of electromagnetic radiation from the 'U.S. Army Medical Intelligence and Information Agency Office of the Surgeon General', with special attention for the investigations in the 'Eurasian Communist Countries'. From the report we quote:

*'The thermal effects of electromagnetic radiation have been reasonably well established through experimental investigation. The nonthermal effects, however, remain a controversial issue 'between scientists in the West and in the Eurasian Communist countries.' ..... 'If the more advanced nations of the West are strict in the enforcement of stringent exposure standards, there could be unfavorable effects on **industrial output and military functions**. The Eurasian Communist countries could, on the other hand, give lip service to strict standards, but allow their military to operate without restriction and thereby gain the advantage in electronic warfare techniques and the development of antipersonal applications.'*

Up to the present time this argumentation is the main reason why the radiation exposure limits in Russia, other Eastern European Countries and China are a factor of 100 lower than the ICNIRP limits adopted in most Western Countries. Health aspects were not mentioned.

1971/72, [USA](#) : [Bibliography](#) of the 'US Naval Medical Research Institute' with over 2000 references on the biological responses to non-ionizing radio frequency and microwave radiation.

1932, [Germany](#) : First description of health complaints caused by 'Kurzwellensendern' (microwave radiation devices): sleep problems, fatigue, headache, etc.

Composition: Dr. L. Vriens, December, 2017

Updated versions of this Compilation will be placed on:

<http://www.stopumts.nl/doc.php/Berichten%20Internationaal/9707/redir>

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<https://ehtrust.org/policy/international-policy-actions-on-wireless/>

<https://ehtrust.org/wp-content/uploads/International-Policy-Precautionary-Actions-on-Wireless-Radiation.pdf>

<https://ehtrust.org/science/medical-doctors-consensus-statements-recommendations-cell-phoneswireless/>

[http://www.cellphonetaskforce.org/?page\\_id=128](http://www.cellphonetaskforce.org/?page_id=128)

<http://www.powerwatch.org.uk/science/studies.asp>

<http://mieuxprevenir.blogspot.nl/2014/06/wireless-and-children-precautionary.html>