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## From Electromagnetic Smog to Electromagnetic Chaos.

## To Evaluating the Hazards of Mobile Communication for Health of the Population

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Yu.G. Grigoriev - Leading Researcher, Dr. Sc. Med., Prof., the Deputy Chairman of the Scientific Council on Radiobiology of the Russian Academy of Sciences, President of the Russian National Committee on Protection from Non-Ionizing Radiation, Member of the WHO Advisory Committee on the International Program «EMF and Public Health», a Member of the International Commission on Electromagnetic Safety (ICES) Abstract

Over the past 25 years, there has been a global change in the electromagnetic environment on the Earth, associated with the widest use of wireless communications by the population, which significantly changed the situation of artificial electromagnetic pollution of the external environment and the methodology for assessing the health risks of all population groups.

In these difficult conditions, nevertheless, many authors in their conclusions neglect the views established in radiobiology in assessing the danger of exposure to electromagnetic radiation of ultrahigh frequencies (EMR microwave), which is associated, for example, with the notions of a critical organ or critical system, the possibility of accumulating adverse effects and the formation of residual damage (long-term consequences). Almost daily brain irradiation of the EMR of the microwave does not attract their attention.

The work uses classical radiobiological approaches to assess the danger of electromagnetic radiation in the microwave range of low nonthermal intensities, including mobile communication for the population and presents some data on the negative impact on public health, including children - mobile phone users. On specific examples, the facts of the relative increase in the risk of developing brain tumors after a long period of active use of cell phones are considered. In many countries, there is a complete disregard for the precautionary principle proposed by the WHO. Children for the first time in the entire period of civilization are included in the risk group. At the same time, in many countries there is a complete disregard for this principle and the recommendations of the International Agency for Research on Cancer (IARC) are ignored.

Even before the era of the development of mobile communications, there were significant differences in the approaches to developing acceptable doses for microwave EMR, but discussions on the possible adverse biological effects of non-thermal low levels of these emissions are still ongoing. At the same time, we can note a positive trend associated with the fact that almost all the leading countries of Europe are already correctly assessing the real danger of the MP and have their own more stringent regulations than in Russia (Austria, France, Italy etc.).

At the same time, we observe the silence of some scientists and important officials in many countries about the possible danger to the population of EMP mobile communications. As a fact, opposite decisions are made about the prevention and protection of the population, including children. At present, the current situation can be described as electromagnetic chaos in the habitat of the population. In our opinion, in the conditions of the existing electromagnetic chaos, it is necessary to inform the population that mobile communication in the absence of self-limitation can be dangerous to health. The population should have an independent choice of the type and the mode of mobile communication. This choice is his voluntary risk.

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