Radio waves and health

3G

Third-generation mobile telephony, 3G, uses the same type of radio waves as television, radio and other existing mobile networks. The base stations are positioned so that exposure to radio waves is kept below established limits.

3G is a development of the mobile telephony that has been in use for many years. It provides increased capacity so that more people can use mobile communication services at the same time. As the use increases and the number of subscribers grows, the networks are expanded.

Third-generation mobile telephony offers new services that facilitate both work and leisure time. For example, a high-speed connection to the Internet can be maintained anywhere. Other services are video calls and positioning, which can be used for anything from rescue services and health care to entertainment.

3G uses the same type of radio waves, as for example, radio, television and the radio communications used for many years by the police, air traffic, shipping and transport companies. The power levels, transmitted from radio base stations for 3G and other mobile telephony, are relatively low compared with other radio communications used in society.

Independent expert organizations have established exposure limits for radio waves, based on many years of research. Mobile telephones for 3G meet the same limits as other mobile phones. These limits include large safety margins. The World Health Organization (WHO), among others, recommends exposure limits that are adopted by national authorities. Research continues in an effort to expand the knowledge of possible effects of radio waves on humans. Ericsson, along with other companies, supports independent research in this area.

The radio wave exposure from 3G base stations is no higher than from base stations for other mobile systems. Base station antennas transmit the radio waves in a specific direction, much like light from a spotlight. This means that an antenna mounted on a house roof directs the radio waves away from the house, not towards it.

The only place where the limits may be exceeded is in close proximity to a base station antenna. The antennas are therefore placed so that people stay outside of that area. The intensity of the exposure drops dramatically when moving away from the antenna and the exposure levels are well below the limits in areas where people normally are. This applies whether the antenna is mounted on a mast, on a roof or on a wall.

For more information, visit
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