

Protecting the public from exposure to radiofrequency from cell towers

Summary

- In 1999, after Toronto Public Health assessed the available health, environmental and technical data, the Board of Health adopted a Prudent Avoidance Policy for the location of new telecommunications towers and antennas. This policy recommended that levels of exposures to radiofrequency (RF) for the general public be kept 100 times below Health Canada's guidelines.
- Toronto Public Health has reviewed recent research and concluded that there are still uncertainties in the science regarding the potential health risks associated long-term exposures to RF.
- Dr. David McKeown, Toronto's Medical Officer of Health, recommends that the Board of Health and City Council endorse a continued prudent avoidance approach when selecting sites for new telecommunication towers and antennas until this scientific uncertainty is addressed.
- He further recommends that the City encourage cell phone carriers to voluntarily adopt the Prudent Avoidance Policy.

History

- Since 1999, there has been a rapidly expanding network of cellular phone towers and other wireless telecommunication structures throughout Toronto. This increasing concentration of telecommunication towers in many locations increases the level of RFs to which the public in the immediate surrounding area is exposed.
- At the request of the Board of Health, the Medical Officer of Health, in collaboration with City Planning, is now reporting on the incorporation of the Prudent Avoidance Policy into the City of Toronto Telecommunication Tower and Antenna Protocol.
- At the request of City Council, City Planning, in consultation with the Medical Officer of Health, is preparing a Telecommunication Tower and Antenna Protocol that will be considered at the Planning and Growth Infrastructure Committee meeting early in 2008.

Potential Concerns Regarding Radiofrequency Waves

- Many telecommunication devices such as cell phones and laptops with wireless internet access use radiofrequency waves. Health Canada's guidelines for exposure to RFs (known as Safety Code 6) protect the public from short-term, high exposure effects of RFs.
- These high exposure effects of RF are well documented and generally well known. They result from the field's ability to increase the temperature of the body.

- There is growing concern, however, that current guidelines may not be health protective enough for continuous, lifetime exposures. As a result, several jurisdictions have adopted stricter limits than those in Canada.
- There is still debate on the health effects of low levels of RF. Areas where uncertainty exists include the relationship between low levels of RF and cancer. Some, but not all, studies in humans and animals show a slight increase in leukaemia and/or other cancers. Some studies have also reported an impact on sleep and some non-specific symptoms.
- Until better information is available to confirm or disprove these concerns, the Medical Officer of Health continues to recommend prudent avoidance to minimize exposures to RF waves.

How About the Phones Themselves?

- When people use cell phones, the handsets themselves expose the users to higher levels of RF than the levels people receive from living near a cell phone tower that transmits the signals to your phone.
- Some of the data available on the health impacts of RF come from studies on cell phone users.
- Cellular telephone users who wish to reduce their exposure to RF can do so by minimizing the use of hand-held units, opting for brands that emit only low radiation, using a remote ear piece, or by using a regular telephone as much as possible.

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