

September 2013

Peel Public Health's Position on Radiofrequencies (RFs) from Wi-Fi

Peel Health

The available scientific evidence indicates that exposure to Wi-Fi in schools is not harmful to the health of students and staff.

In assessing the evidence, Peel Health staff evaluated a number of expert panel reviews and other peer-reviewed literature. The quality of the evidence was assessed so that studies of higher quality were weighted more heavily. As part of this assessment, the study methods and design were considered, including sample size, participation rates, nature of the exposure to Wi-Fi and sources of potential bias.

Peel Public Health continues to monitor and review new evidence regarding the potential health effects associated with Wi-Fi and encourages ongoing provincial and federal research into this issue.

Background

The International Agency for Research on Cancer (IARC) provides government authorities with expert, independent, scientific opinion on environmental exposures that may increase the risk of cancer. In May 2011, IARC classified radio-frequency electromagnetic fields as **possibly** carcinogenic to humans (Group 2B) based on an increased risk for glioma, a type of brain cancer, associated with heavy cellular phone use (when the phone was used in such a way that it was held close to the head).

The IARC 2B classification was based on the following exposures:

- occupational exposures to radar and to microwaves;
- environmental exposures associated with transmission of signals for radio, television and wireless telecommunication; and
- personal exposures associated with the use of cellular telephones

The other classifications are: Group 1 - Carcinogenic to humans; Group 2A - Probably carcinogenic to humans; Group 3 - Not classifiable as to its carcinogenicity to humans and Group 4 - Probably not carcinogenic to humans.

It is important to note the difference between exposure from a cellular telephone as opposed to low-level exposure to radiofrequency (RF) energy from Wi-Fi equipment such as access points (routers). Wireless routers and devices accessing only a Wi-Fi signal (e.g. laptop) are generally associated with far lower RF exposure.