



November 17, 2010

Claire Avison
Executive Director
Cross-Section Strategic Initiatives Branch
Ministry of Education
2nd Floor, 620 Superior Street
Victoria BC V8V 1X4

Dear Claire Avison:

At the request of the Ministry of Education I am sending the following interim correspondence regarding parent concerns about Wi-Fi in Schools. A more fulsome document will follow.

A recent Canadian review of the evidence concerning Wi-Fi and health effects was published this year by the Ontario Agency for Health Protection and Promotion (OAHPP) (http://www.oahpp.ca/resources/documents/10-09_010_Wireless_technology_and_health_outcomes_v2.pdf).

Among expert assessments cited, the OAHPP review highlights:

- The Royal Society of Canada 2009 review (Habash et al., 2009) on radiofrequency fields which states that “after a decade of additional research, there is still no conclusive evidence of adverse effects on health at exposures levels below the current Canadian guidelines”.
- The UK Health Protection Agency (Health Protection Agency, 2010) states “There is no reason why schools and other public facilities should not use Wi-Fi equipment.”
- A review of 46 blind or double blind studies which also failed to find evidence supporting “electro-magnetic hypersensitivity (Rubin et al., 2010)”.

The same review by the Ontario Agency points out that Wi-Fi exposures are only a small fraction (less than 1%) of what is received during typical cell phone use. While the Interphone study did find that intensive, long duration cell phone use (≥ 1640 hours cumulative time) may be associated with a small increased risk of brain tumors on the side of the head where the phone is used, the authors caution that biases and measurement errors prevent a causal interpretation (Interphone Study Group, 2010).

Among research cited in the OAHPP report was that by Foster (2007). Foster measured Wi-Fi radiofrequency levels at 53 sites in Europe and the US, and found that levels were below those contributed by other radiofrequency sources (typically including cell phone base stations, FM radio transmissions, and radiofrequency emissions from microwave ovens).

Also, in an interesting comparison with a pre-cell phone world, Foster showed that the median power density measured over 70-3000 MHz was similar to what was measured over 50-900 MHz in 1980 in US cities (Foster, 2007)

If despite the lack of evidence of any adverse health effects related to Wi-Fi and the fact that Wi-Fi exposure constitutes only a small fraction of total radiofrequency exposure, school-boards still wish to consider measures for reducing children's exposure to Wi-Fi, inexpensive (although unproven) measures include:

- Limiting Wi-Fi use to certain times or locations within the school
- Turning off Wi-Fi when not in use
- Disconnecting Wi-Fi in rooms that do not use computers
- Ensuring user manuals for smart-phones and smart tablets are read and recommendations are followed.

Sincerely,

A handwritten signature in black ink, appearing to read 'P.R.W. Kendall', written over a horizontal line.

P.R.W. Kendall
OBC, MBBS, MHSc, FRCPC
Provincial Health Officer