WEST VANCOUVER SCHOOL DISTRICT
The premier place for learning.

Wireless Technology Q & A

In the spring of 2007, the West Vancouver Board of Education made a commitment to the *District Plan for Teaching and Learning with Technology*. This plan set the course for a commitment to improving technology to support teaching and learning which remains in place today. One key aspect of the District's commitment has been to increase access for staff and students through the use of web based technologies. The wireless technology used by the District to support access to *21st century learning* in all West Vancouver schools meets national and international safety standards. The West Vancouver School District is proud of our safe, supportive, and progressive Information and Communication Technology strategies. We invite you to review the following background and facts about wireless technology.

Q: ***Does the wireless technology used in West Vancouver schools meet national and international safety standards?***

A: Yes. Wireless technology used in all schools and facilities within the West Vancouver District School Board meets the safety standards and guidelines established by Health Canada and the World Health Organization. Additionally, the following statements were issued by health and education authorities:

- **Health Canada Statement (August 31, 2010):**
  - Wi-Fi is the second most prevalent form of wireless technology next to cell phones. It is widely used across Canada in schools, offices, coffee shops, personal dwellings, as well as countless other locations. Health Canada continues to reassure Canadians that the radiofrequency energy emitted from Wi-Fi equipment is extremely low and is not associated with any health problems. Based on scientific evidence, Health Canada has determined that exposure to low-level radiofrequency energy, such as that from Wi-Fi equipment, is not dangerous to the public.

  - Radiofrequency energy levels from Wi-Fi equipment in all areas accessible to the general public, including school settings, are required to meet Health Canada's safety guidelines (Safety Code 6). The limits specified in the guidelines are based on an ongoing review of thousands of published peer reviewed scientific studies on the health impacts of radiofrequency energy. Levels of radiofrequency energy emitted from Wi-Fi equipment are typically well below these safety limits. As long as exposure is below these established limits, there is no convincing scientific evidence that this equipment is dangerous to schoolchildren or to Canadians in general.

  - For more information:
    Health Canada: Wi-Fi Safety – *click here*

BC Ministry of Education:

- The Provincial Health Officer has advised that Wi-Fi signals are not considered a health risk as they are no stronger than signals for cellular phones, FM radio or television.
- School districts have the autonomy and flexibility to determine the appropriate use of learning aids in the classroom to support the learning objectives outlined in the B.C. curriculum.
- Although the number of schools in the province accessing Wi-Fi networks is not tracked by the ministry, we are aware that wireless internet connections are commonly used.

Q: ***What are the sources of the wireless-related safety standards and guidelines?***

A: Our school board adheres to the standards and guidelines set out by Health Canada and the World Health Organization. These standards and guidelines may be accessed at the following links:

- Health Canada's Radiofrequency Energy Guidelines (Safety Code 6)
- World Health Organization: Electromagnetic fields
- ANSI C95.1-1991 IEEE Standards for Safety Levels with Respect to Human Exposure
- International Council of Non-Ionizing Radiation Protection (ICNIRP) limits

Q: ***What are some key points in these standards and guidelines?***

A: *Following are some excerpts from Health Canada:*

> "Over the past decade, millions of Canadians have come to rely on wireless telecommunication technology, including cell phones, hand-held devices and wireless laptop computers. A cell phone tower and a home computer's wireless router are both examples of base stations. Without such devices, what have become our everyday necessities and conveniences simply could not exist. Industry Canada, the national telecommunications regulator, requires that levels of radiofrequency energy coming from cell phones and cell phone towers fall below Health Canada's RF exposure limits.
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> "The typical levels of RF energy that you find coming from base stations, including cell phone towers, are thousands of times below the limits for public exposure. The specified limits for public exposure apply to everyone—including the elderly, individuals with health concerns, children and pregnant women—and allow for continuous, 24/7 exposure."

Following is an excerpt from the World Health Organization:

> "Considering the very low exposure levels and research results collected to date, there is no convincing scientific evidence that the weak RF signals from base stations and wireless networks cause adverse health effects."

Q: ***Why does the West Vancouver School District provide students with access to wireless technology?***

A: Today's learners need to be educated through 21st century teaching strategies and tools. Wireless technology is a key component of the above. In addition, the West Vancouver School District consulted with students, staff, parents and community members to develop progressive strategies for implementing information and communication technology (ICT) within our schools built around a vision to improve student engagement, learning, and achievement through ICT-enabled learning environments. All West Vancouver School District schools have wireless technology in place to ensure learners, teachers and staff can access wireless technologies.

Examples of how wireless technology is used in learning and teaching include:

- providing access to information and collaboration through web-based, secured learning environments (inside45 portal)
- providing assistive technologies to enable students with special needs to work with their classmates in their classrooms
- connecting with classrooms in other communities, provinces, countries, and continents
- utilizing digital texts, using online resource banks, downloading video streamed programs and productions to support instruction
- moving into SD45 Connected wireless so students and staff can bring their own devices in to school to further their learning in a filtered, secured environment
- extending learning with small group work