An aerial photograph of a residential neighborhood. In the foreground, a tall, silver metal lattice tower stands prominently, equipped with several large, white, parabolic satellite dishes and smaller antennas. The tower is positioned near a street with a white car parked. The background shows a dense cluster of houses with dark roofs, some with visible chimneys. Bare trees are scattered throughout the scene, suggesting a cooler season. The overall lighting is bright, casting distinct shadows.

The Dangers Of Cell Antenna In Residential Neighbourhoods

Fire Fighters at Risk from Antenna Radiation

Dr. Magda Havas, BSc, PhD, Associate Professor, Trent University, Peterborough, ON.

On December 19, 2011, the Town of Oakville passed a motion to allow Bell cellular antennas to be installed on the Emergency Response tower at the Bronte Fire Station #1. This tower is adjacent to the fire hall, near a school, and in the middle of a residential community. Oakville citizens are strongly opposed to the motion and with the help of councillors who voted against the motion are consolidating support to have the motion reversed.

What Mayor Rob Burton, Police and Fire Chiefs, and Oakville Council Members may not have known—when they voted for this motion—is the following.

In May 2011, the World Health Organization (WHO) classified radiofrequency electromagnetic fields as a physical agent possibly carcinogenic to humans. This classification was based on the WHO's review of several studies, including the Canadian INTERPHONE study, which showed significant increased risk of brain tumours for those who used cell phones for more than 10 years.

In October 2011, Health Canada issued an advisory that consumers limit the length of cell phone calls, use “hands-free” devices, replace cell phone calls with text messages, and that children under the age of 18 limit their cell phone use. This is a sharp reversal from previous Health Canada statements that cell phones were safe to use.

But what about cellular antennas? Cell phones and cellular antennas emit the same microwave radiofrequency (RF) radiation.

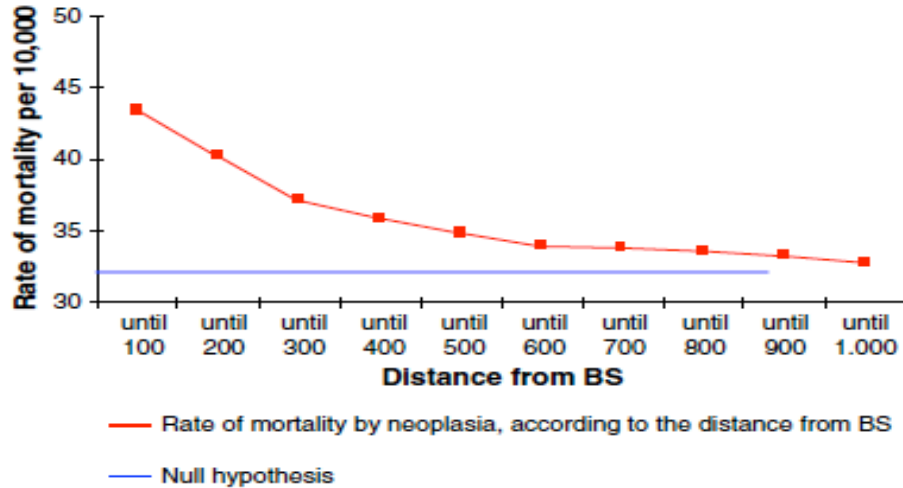
“Does this new WHO classification refer to the radiation from cellular antennas?” Journalists posed this question to the scientists at the WHO press conference. Their answer was “yes.” Radiation from cell phones and cellular antennas are a possible cause of cancer.

But unlike the extensive media coverage of the links between cell phones and cancer, the mainstream media does not cover stories on cellular antennas and towers. Does the cell phone industry have that much control over the media, or are journalists not aware of the recent studies that show harm?

At Trent University in Peterborough, I teach a course that examines the human biological effects of microwave radiation. I also teach students how to convey scientific information to the public. Both are approved credited courses that go towards a university degree. In this article, I would like to introduce you to recent studies that show an increased risk of cancers and other health effects for those who live near cellular antennas.

In July 2011, shortly after the WHO released their report about cell phones and cancer, a study conducted in Brazil was published showing that people who lived near cellular base stations (BS) experienced a higher rate of mortality from cancer than those who lived more than 500 metres away from BS (see figure below).

This is the third study of its kind. The other two studies documenting an increased risk of cancer near cellular base stations were in Israel and Germany. Visit www.mybronte.ca to read the studies.



In addition to cancer, those who live within 300 to 400 meters from cellular base stations experience symptoms of electrohypersensitivity (EHS). Early signs include insomnia, headaches, difficulty concentrating, discomfort, depression, anxiety, chronic fatigue and/or chronic pain in joints and other areas.

Based on the recent cellular antenna studies, the critical distance for cancers and EHS seems to be between 300 to 500 metres. For the new 4G LTE antennas (4th generation Long Term Evolution) the critical distance is likely to be much further as these antennas are much more powerful with coverage extending beyond 30 kilometres.

These well-funded government studies prompted Israel's health authorities to suspend the launch of 4G antennas until appropriate studies can be completed to determine public safety. The city of Paris, France recently banned all new cellular antennas from government buildings. The government of India is also responding by removing antennas.

It has come to my attention that the Town of Oakville is taking action to limit and restrict the placement of cellular antennas—noting that there are serious health effects associated with the radiation the antennas emit. This is admirable as you are setting an example for other municipalities in Canada to maintain authority over local decisions. It is clear that safety guidelines for cell phones and cellular towers that Health Canada had established are obviously out of date according to the newest research examined by the WHO.

It seems that the more Oakville tries to keep the towers away, the harder the cell phone industry works to place towers hidden deep within your community. New 4G stealth towers that resemble telephone poles are now being placed a few feet away from homes without warning or notifying the community.

Your success in removing the Rogers tower from the Hopedale Mall was a great victory for communities. It demonstrates that local governments have both the authority and responsibility for deciding what they will and will not allow in their neighbourhood. It demonstrates you can protect your citizens from the chronic microwave radiation from cell towers. It also demonstrates that neither the wireless industry nor Industry Canada has the final word.

It seems that Bell is attempting to financially influence other intergovernmental agencies, such as the Oakville Police and the Fire Department, in exchange for commercial co-location cellular antennas on the Bronte Fire Station emergency-only fire tower.

The placement of commercial cellular antennas at Bronte is an especially sensitive issue for me as I was part of a team of scientists that was asked by the International Association of Fire Fighters to stop cell towers from being erected on fire hall property.

You may not be aware that The International Association of Fire Fighters (IAFF) at a meeting in Boston in August 2004 passed Resolution 15, which states the following:

Resolution 15: *The IAFF oppose the use of fire stations as base stations for antennas and towers for the conduction of cell phone transmissions until such installations are proven not to be hazardous to the health of our members.*

This resolution was initiated and passed 8 years ago because the cell phone industry was increasingly targeting fire halls for their base stations and because an increasing number of scientific studies were documenting adverse biological and health effects associated with microwave radiofrequency radiation. Many of the studies are discussed in the Position Paper available at the IAFF website.

<http://www.iaff.org/hs/Facts/CellTowerFinal.asp>

Susan Foster, a medical writer, and I presented information to the Canadian Caucus of the IAFF at the Boston meeting in 2004. After our presentation, fire fighters lined up to talk with us. Some told us they experienced vertigo shortly after cellular antennas were placed on their fire halls. They were afraid to tell their union for fear of losing their jobs. Others told us of impotence, headaches, difficulty sleeping, and not being able to think clearly.

A study was conducted a few years earlier with 6 fire fighters at a California fire hall where cellular antennas were installed on the roof 5 years earlier. These fire fighters underwent functional brain (SPECT) scans and TOVA testing for neurological measurement of reaction time, impulse control, and decision-making.

Five of the 6 firefighters showed abnormal results. The 6th was the Fire Chief who spent half of his time at a different fire hall. Their symptoms included slowed reaction time, lack of focus, lack of impulse control, severe headaches, anesthesia-like sleep, sleep deprivation, depression, and tremors.

The functional brain scan revealed a pattern of abnormal change that was over a wider area than would normally be seen in brains of individuals exposed to toxic chemicals. Dr.

Gunnar Heuser, the medical doctor responsible for the study, stated that the most plausible explanation was exposure to radiofrequency radiation.

Another cause of this illness is from the large electrical transformers that are installed at the base of the tower to generate the wireless frequencies. The transformers create unwanted dirty electricity that pollutes the wiring throughout the fire hall. The RF radiation now flows back through the wires and radiates from the walls. This is like a one-two punch with RF radiation flowing through the air and on the electrical wires.

“This [the Heuser] study calls into question whether or not we are sacrificing the health and well being of our countries first responders for the convenience of a technology we’ve come to rely upon,” says Susan Foster.

According to Lt. Ron Cronin of the Brookline, MA Fire Department, “Some firefighters with cell towers currently located on their stations are experiencing symptoms that put our first responders at risk. It is important to be sure we understand what effects these towers may have on the firefighters living in these stations.”

Fire fighters are brave men and women who risk their lives to protect our lives and property. They shouldn’t be asked to risk their health for the benefit of Bell.

Clearly, if the Police and Fire Chiefs, Mayor, and Councillors—who voted in favour of this motion—had known about the more recent scientific studies and the effects of cellular antenna radiation on fire fighters and local residents, I doubt they would have voted this way. Let’s hope that common sense will prevail and the decision to place antennas on this tower will be reversed.

FYI: Dr. Magda Havas will be speaking at the March 1st community meeting at 7 pm at The Church of the Nazarene, 320 Bronte Road. Dr. Havas will present a special lecture about the potential health effects from the chronic exposure to the RF microwave radiation that will be emitted by the commercial cellular antennas that have been installed at Bronte Fire Hall. Visit www.mybronte.ca for more information.

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