

March 10, 2021



To: Pembina Trails School Trustees
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Superintendent of Education/CEO

- Ted Fransen, tfransen@pembinatrails.ca

Dear Trustees and Superintendent of Education, Pembina Trails School Division, Winnipeg:

Subject: Non-protective radiation guidelines, Safety Code 6, and health risks to children and staff at École Dieppe from proposed Rogers cell tower at 523 Harstone Road: Scientific evidence to support cautionary measures and instead a site location >500 meters from the school and nearby daycare

As you may know, Rogers Communications Inc. (Rogers) is planning to install a cell tower on Harstone Road, very close to École Dieppe and a daycare. Our letter is in support of having the proposed cell tower sited at a location that is at least 500 meters from the currently proposed site.

Background information

Mission and goals of Manitobans for Safe Technology (M4ST)

M4ST is a volunteer, nonpartisan group of Manitobans concerned about the health aspects of wireless radiation. M4ST's mission is to educate and inform citizens, the medical community, elected representatives and others about the health risks of exposures to wireless radiation with the goal of achieving healthier communities. Goals include a proper revision of Health Canada's Safety Code 6, promotion of wired technologies and implementation of ALARA—as low as reasonably achievable—for all wireless radiation exposures.

I am a research biologist having retired after more than 30 years of service with the federal government where I worked on various research projects including ecosystem toxicology and population genetics of wildlife using DNA technology. I've also worked for the University of Manitoba in cancer research and parasitology. My Master of Science degree is in Entomology/Toxicology and my B.Sc. (Honours) is in Zoology.

After retirement, I became involved in investigating the scientific evidence underpinning Health Canada's safety guidelines for human exposure to wireless radiation such as that actively generated and emitted by the proposed cell tower antennas. I am adding my voice to those of international scientists independent of industry and of Canadian medical doctors who state that the guidelines in Safety Code 6 (2015) (7), adopted by the federal department in the Government of Canada that regulates cell towers, are outdated and inadequate.

1. Health Canada's safety guidelines, Safety Code 6, are outdated and inadequate

Safety Code 6 (SC6) guidelines were established in 1979 and, although undergoing several revisions, are still based on the now disproven premise that there can be no adverse effects on human health unless there is excessive heating of body tissue. In fact, for the frequencies that would be emitted from this cell tower, Health Canada's Safety Code 6 guidelines would conclude there are no adverse biological effects if heating of tissue from these emissions can be dissipated from body tissues within 6 minutes (Table 2.2.2. Table 5; see reference 7).

There are hundreds of high quality studies showing harm at emissions levels that are much lower than the maximum levels in Safety Code 6 guidelines—e.g., lower than 1% of SC6. Some studies are summarized in a recent paper by Dr. Anthony B. Miller et al.(10). Another of Dr. Miller's papers(9) summarizes the evidence that radiofrequency radiation, including the type from cell towers, warrants a known carcinogen classification. This is in the same category as asbestos. Other studies can be found in the BioInitiative report(1).

In 2014, during the last revision of Safety Code 6, more than 50 Canadian MDs(4) and more than 50 international scientists(5) called on Health Canada for more protective guidelines/standards for radiofrequency radiation—to no avail.

The flawed process in revising Safety Code 6 is covered in several articles in the *Canadian Medical Association Journal* (CMAJ) (11) (12) (13).

In short, there is overwhelming evidence that precautions should be taken, especially for children, pregnant women (developing fetuses) and persons with compromised health.

As we know, Health Canada has been slow to act on a number of agents that have proven to cause widespread adverse health effects: asbestos, cigarette smoke, Bisphenol A, thalidomide, vaping, to name a few. Based on what science is telling us, radiofrequency/microwave radiation, such as that emitted from cell tower antennas, is sure to be added to this list.

2. Recommended safe distance for cell towers is >500 meters

There are more than 20 studies on adverse biological effects in people living near cell towers¹. Levitt and Lai provide a good overview in their 2011 review(8). They conclude that "some research does exist to warrant caution in infrastructure siting". Other studies can be found in the BioInitiative report (2). A recent study by Zothansiana (14) found blood abnormalities and DNA damage in persons living close to a cell tower.

¹ I would be glad to provide this list upon request. These studies are featured in the CBC Marketplace TV program (Wendy Mesley). The Secret Inside Your Cellphone. <https://www.cbc.ca/player/play/910329411834>

Some experts in wireless radiation, including Dr. Magda Havas, retired professor from the University of Trent, Ontario, recommend sources be distanced at least 500 meters from homes and schools. Dr. Havas bases this distance partially on a study done by Dr. Dode in Brazil (6). Below is a graph from the Brazil study showing at what distance the adverse effects (neoplasms) are no longer statistically significant: it is approximately 500 meters, marked by the big X.

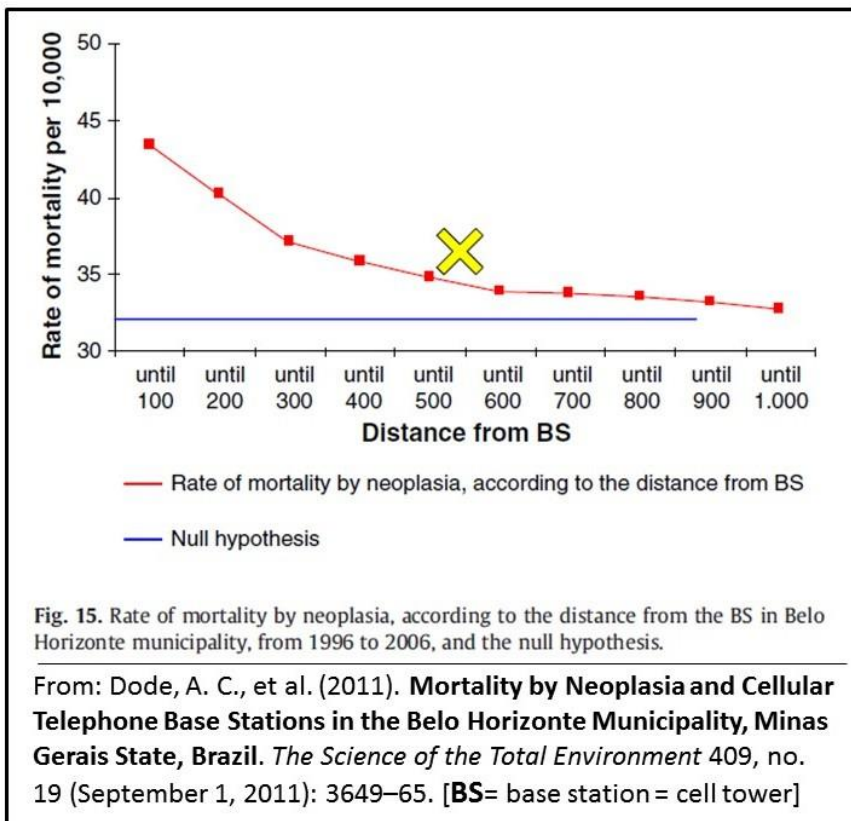
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There is ample evidence in peer-reviewed scientific and medical literature that indicates that if this cell tower is installed as currently proposed, students and staff will be harmed. I hope this will provide enough information that you will take whatever steps you can to minimize the risk to students and staff at École Dieppe by urging Rogers and the City of Winnipeg to locate the cell tower >500 meters away from the school and playground.

Please let me know that you have received this email.

Please feel free to contact me with any questions, for clarification or for more information.

Sincerely,  
 Margaret Friesen M.Sc.  
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## References:

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