

Powerlines linked to leukemia in B.C. report

BY PAMELA FAYERMAN, VANCOUVER SUN JANUARY 13, 2009 10:30 AM



Cecil Dunn, a spokesman for the Tsawwassen Residents Against Higher Voltage Overhead Lines (TRAHVOL), stands under the lines along 53A Street. In his hand is a EMF tester, which measures the electromagnetic field.

Photograph by: Stuart Davis, Vancouver Sun

METRO VANCOUVER -- Living close to high-voltage power lines may produce one additional case of leukemia every two years in B.C., according to "ballpark assumptions" by B.C. Centre for Disease Control environmental health experts.

The projection by Dr. Ray Copes, director of the environmental health services division and Prabjit Barn, an environmental health scientist, is in an article headlined "Is living near power lines bad for our health?" in the November issue of the B.C. Medical Journal (BCMJ).

Government spokesman Jake Jacobs said the government was not influenced by the article when it decided to offer to buy homes along a controversial, upgraded B.C. Hydro right of way in Tsawwassen.

"The government had already made that decision several months ago," Jacobs said in an interview. "The homeowners were offered this olive branch because of the high anxiety and because it was deemed as the reasonable thing to do."

Cecil Dunn, spokesman for the property owners who spent nearly five years fighting the power-line upgrade, which was completed last year, said there are only a few days left for the owners to decide if they want to take part in the Home Purchase Offer Program.

It was expected that most owners of the 138 properties under the power line will seek appraisals, the first step in the process towards government purchase of the properties.

Dunn said he was not surprised the decision to buy the homes was made independent of the latest medical research.

"The government has always been aware of the liability but wouldn't admit it. Now they are trying to quiet us down before the next provincial election."

In the BCMJ article, Copes and Barn say that the International Agency for Research on Cancer regards as "sufficiently well established" the evidence that electromagnetic fields (EMF) are "associated" with childhood leukemia. Association does not show proof of cause but it is commonly a level of evidence found in epidemiological studies, such as those done decades ago which showed an association between smoking and lung cancer.

The B.C. authors focus on a 2005 British study which found that there is an increased risk of 69 per cent for leukemia in children living within 200 metres of power lines. The risk is increased to 23 per cent if children live 200 to 600 metres of the lines. In Tsawwassen, the power lines literally run right over more than 100 homes.

Copes said there have been so many studies that have found an association between power lines and childhood leukemia that "while one cannot presume EMF causes cancer, one also cannot ignore the pattern that has emerged over several studies."

"The relative risk is modest but it is not zero," said Copes, adding the British study was used to come up with the B.C. figure of one extra case every two years.

"Using current B.C. leukemia rates and assuming similar proportions of the population live near high voltage lines, on a statistical basis, there may be one additional leukemia in B.C. every two years. To eliminate this risk, one would need to achieve a separation distance of 600 metres between every high voltage power line and the nearest residence," he said.

In 2005, the most recent year for which comprehensive B.C. Cancer Agency data exists, 38 children in B.C. were diagnosed with leukemia. The Fraser health region, which encompasses Tsawwassen, was the region with the highest tally of both children and adults diagnosed with leukemia. It is also the most populated region in the province.

About 520 adults are diagnosed with leukemia across the whole province each year.

Barbara Kaminsky, chief executive officer of the Canadian Cancer Society's B.C. and Yukon division, said she had not read the article, but while one additional case every two years may not seem like a significantly increased risk, "if it is your son or daughter, then it is a big deal."

Kaminsky said her organization has not changed its position from 2006 when it submitted a brief to the Environmental Assessment Office and the B.C. Utilities Commission that while there is insufficient evidence to either rule out or confirm a definitive link between exposure to EMF and leukemia, the potential carcinogenic effect does engender public concern, and so when it is practical to do so, power lines in close proximity to homes and schools should be avoided.

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