

PREVENT
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October 25, 2013

Mr. Bob McDonald
Quirks & Quarks, CBC Radio
P.O. Box 500 Station A
Toronto, ON M5W 1E6

Dear Mr. McDonald,

This letter is in response to your show, *The Cancer Chronicles*, first aired on Saturday, October 19. We, representing the undersigned organizations, disagree with a number of points raised by the author of *The Cancer Chronicles*, George Johnson. We have not yet had the opportunity to do a detailed critique of the book, so base our comments on your interview with Mr. Johnson. We would very much like to provide a detailed rebuttal to his contention that cancer is simply ‘random’ for your listeners on a future show.

Cancer Statistics

Mr. Johnson says that cancer rates have not gone up appreciably in the past few decades. As you may know, many cancers have very long gestation periods. The Canadian Cancer Registry began collecting data from the provinces and territories in 1992.¹ The US National Program of Cancer Registries reports data from 1999 onwards.² Looking at cancer rates beginning in the 1950’s, when the use of chemicals in industrial and agricultural processes increased dramatically, the statistics paint a very different story.

Even after correcting for the aging of the population, the incidence of cancer in the United States rose 49.3% between 1950 and 1991. The figures for Ontario, from approximately 1965-1995, show an overall increase of 18% for women and 31% for men. Increases in specific cancers are even higher:³

- Breast cancer in women has increased 29% and is among the highest in the world.⁴
- Prostate cancer in men has risen by 102% and testis cancer by 65%.
- Non-Hodgkin’s lymphoma increased by 106% in women and 115% in men.
- Brain cancer increased by 56% in women and 35% in men.
- Multiple myeloma increased by 60% in women and 79% in men.
- Melanoma increased by 116% in women and 273% in men.
- Thyroid cancer increased by 146% in women and 133% in men.

In England and Wales, where they have been keeping detailed statistics for a longer time, the Office for National Statistics notes that incidence of cancer rose by around 20% in men and 30% in women between 1971 and 1999.⁵

We also find many pockets of cancer that cannot be explained by ‘randomness’. For example, in Prince Edward Island, the incidence rate of melanoma among males is the highest in the country — 60% higher than the national average.⁶ We do not believe this rate is coincidental, given that PEI sprays more pesticides than any other province and research shows that workers who apply certain pesticides to farm fields are twice as likely to contract melanoma as those that don’t.⁷

In response to Mr. Johnson’s contention that cancer is little more than the natural effect of aging, we note that cancer is the most common cause of illness-related death in Canadian children over one year of age.⁸ In addition, cancer rates continue to rise among teens and young adults in Canada, particularly among young women, aged 15 to 29, with new diagnoses increasing by about 1.4% a year.⁹ Testicular cancer incidence is highest among young men, aged 30-29,¹⁰ and has been increasing for several decades at a statistically significant rate (1.5% per year between 1996 and 2005).¹¹

Causes of cancer

In your interview, Mr. Johnson attempts to attribute cancer to specific elements — 30% of cancers are caused by smoking cigarettes; 30% related to diet and exercise; 5% by viruses, etc. This simplistic approach to causation has long been discarded by cancer prevention researchers,¹² in favour of a ‘web of causation’ that recognizes the interconnections between carcinogens, endocrine disruptors, ionizing radiation, infectious diseases, inflammation and immune suppression, with critical windows of development (e.g. in utero) a key factor in exposure.

The International Agency for Research on Cancer (IARC) has identified 111 substances known to be carcinogenic to humans (Group 1),¹³ many of which people are exposed to regularly. A number of elements have been directly related to or associated with increased rates of cancer, including asbestos,¹⁴ pesticides (non-Hodgkin lymphoma, leukemia, brain cancer, prostate cancer, kidney cancer in children),¹⁵ and endocrine disruptors (BPA).¹⁶ Most recently (October 17, 2013), IARC announced that exposure to outdoor air pollution, and the particulate matter therein, causes lung cancer and is associated with an increased risk of bladder cancer.¹⁷

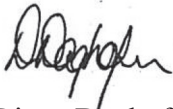
IARC has also identified 22 (as of 1995) chemicals, groups of chemicals or mixtures as known human carcinogens (IARC Group 1) and for which exposures are mostly occupational.¹⁸ A recent Canadian study found an increase in breast cancer for women who work in farming, the automotive plastics sector, food canning, bars and casinos, and metalwork.¹⁹

A growing number of cancer researchers, non-governmental organizations and Canadian residents have recognized the lack of focus being put on identifying the root causes of cancer. Still, only 2.6% of public resources dedicated to cancer research (those contributed through our donations and tax dollars) are focused on primary cancer prevention.²⁰ In 2008-09, the President’s Cancer Panel in the US noted their concern that, “the true burden of environmentally induced cancer has been grossly underestimated.”²¹ There are over 80,000 chemicals on the market, many of which are included in consumer products used

by millions of people every day, yet they continue to be understudied and under-regulated, with only about 200 of them assessed for health effects to humans.

We urge Quirks and Quarks to present this pressing side of the cancer story on a future show, and are happy to provide knowledgeable and articulate scientists to present the case for the environmental causes of cancer.

Sincerely,



Diana Daghofer

Co-Chair, Prevent Cancer Now, on behalf of:

Reena Ahluwalia, BScN,RN, Ontario Nurses for the Environment Interest group of the Registered Nurses Association of Ontario

Ken Bondy, National Coordinator, Health, Safety and Environment, Unifor

James T. Brophy, PhD, University of Stirling, Centre for Public Health and Population Health Research and Department of Sociology, Anthropology, and Criminology, University of Windsor

Rosanne Cohen, Executive Director, Breast Cancer Action Montréal & FemmeToxic

Gideon Forman, Executive Director, Canadian Association of Physicians for the Environment

Michael Gilbertson, PhD, Getting to Know Cancer

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