

This document was written by me and represents my views and opinions.

Recently a sensationalistic and inaccurate documentary on CBC's "The National" and their web page falsely accused Dr. J.C. McDonald (Professor Emeritus, Epidemiology; McGill and Imperial College) of being "hired by the asbestos industry" in the early to mid 1960's.

To date one complaint has been filed with the CBC Ombudsman, more complaints with this or other civil and "watchdog" bodies will follow.

Here is what is true as I understand it:

Professor McDonald was recruited from a successful public health epidemiology career in the UK to Chair the McGill Department of Epidemiology in 1964. He was not "hired by", nor was any part of his salary paid by, the "asbestos industry", either then or at any time since. Indeed, his ground-breaking study of chrysotile miners and millers was first suggested to him by Dr. Christopher J. Wagner (who found the relation between crocidolite asbestos and mesothelioma in his seminal 1960 publication). The project was also suggested by the Geographic Pathology Committee of the UICC (in 1964 following the New York Conference chaired by Irving Selikoff and Jacob Churg, and organized with the help of John Gilson), and approved by a Special Committee of NHRDP Canada, consisting of prominent Canadian researchers in many fields. NHRDP ultimately could not fund the study, and suggested that the mining industry be held responsible for paying for a large part of it. Additional funding came from the United States Public Health Service, NHRDP itself, and the medical research councils in Canada and the UK. Later funding for the last two follow-ups of the cohort came from a peer-competition reviewed grant from NHDRP, per the acknowledgment in the British Journal of Industrial Medicine in 1993 (1).

Dr. McDonald always acknowledged the sources of his funding and, even more important, never concealed the fact that his research found a direct link between exposure to chrysotile mining and milling and the incidence of asbestosis, lung cancer and mesothelioma, in a dose-dependent manner. As early as 1973 (2) Dr. McDonald found mesothelioma among chrysotile workers fourfold greater than expectation. By 1997 the McDonalds "wrote that 27 mesothelioma deaths 'can be attributed with reasonable certainty to occupational exposure in the Quebec chrysotile production industry'" (3).

Dr. McDonald's work, in my opinion, measured up to the highest ethical standards of research then and now. As recently as 2011, the most recent IARC

monograph on "asbestos" (six named fiber types) (4) references McDonald's work no less than eight times.

Part of the current difficulty is a conflating of good, ethical, and well conducted science and public statements that may be different than those some would like to hear. Holding views on public policy that are different from those of others does not constitute research misconduct. Having and discussing different views is part of legitimate academic debate and discussion.

Part of the problem has been a conflation of what this author holds to be true about chrysotile mining and export from Quebec (it has ended and should not be restarted, including from existing stocks) and legitimate research disagreements about the relative potencies of fiber types for mesothelioma, for which the consensus view is that commercial amphiboles are more potent. There is debate about the degree of that difference (see for example papers from the UK Health and Safety Executive, including but not limited to (5) and (6), and the World Health Organization *scientific publication* on the subject which states that "There are distinct differences in the propensity of the different fibre types to cause mesothelioma. Amphibole (amosite and crocidolite) is considerably more potent than chrysotile" (7)).

(signed Feb. 16, 2012),

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(1) McDonald JC, Liddell FD, Dufresne A, McDonald AD. The 1891-1920 birth cohort of Quebec chrysotile miners and millers: mortality 1976-88. *Br J Ind Med.* 1993; Dec;50(12):1073-81.

(2) McDonald JC. 1973. Cancer in chrysotile mines and mills. In: *Biological Effects of Asbestos* (Bogovski P, Gilson JC, Timbrell V and Wagner JC, editors) IARC Scientific Publication No. 8. Lyon France. Pages 189-194.

(3). Ogden T. Reply. *Ann Occup Hyg* (2010) 54(3): 365-366.

(4) IARC Monographs on the Evaluation of Carcinogenic Risks to Humans Part C: Arsenic, Metals, Fibres, and Dusts; LYON, FRANCE; VOLUME 100 (2011); A Review of Human Carcinogens, pp. 219-310: ASBESTOS (CHRYSOTILE, AMOSITE, CROCIDOLITE, TREMOLITE, ACTINOLITE, AND ANTHOPHYLLITE).

(5) Hodgson JT, Darnton A. The quantitative risks of mesothelioma and lung cancer in relation to asbestos exposure. *Ann Occup Hyg.* 2000 Dec;44(8):565-601.

(6) Rake C, Gilham C, Hatch J, Darnton A, Hodgson J, Peto J. Occupational, domestic and environmental mesothelioma risks in the British population: a case-control study. *Br J Cancer.* 2009 Apr 7;100(7):1175-83.

(7) Churg A, Roggli V, Galateau-Salle F, Cagle Ph. T., Gibbs A.R., Hasleton Ph. S. and 17 others. Mesothelioma. In: (2004) Travis WD, Brambilla , Konrad Muller-Hermelink H, Harris CC, editors; **World Health Organization Classification of Tumours: Pathology and Genetics of Tumours of the Lung, Pleura, Thymus and Heart**, WHO / International Agency for Research on Cancer (IARC); IarcPress, Lyon, 2004, pages 128 ff.