How the asbestos industry used McGill University scientists to promote its interests

Kathleen Ruff

Asbestos Symposium, Copenhagen
December 12, 2014
Trends in Asbestos Production, Export and Deaths in Canada

Asbestos Production & Exports 1948-2022

Deaths 1970-2005

Asbestos Tonnes (x 1000)


Production
Exports
World Asbestos Production
1920 – 2010

Source: United States Geological Survey
World Production of Asbestos, by Type

- Anthophyllite
- Amosite
- Crocidolite
- Chrysotile

Quantity, million metric tons

Year:
- 1900
- 1910
- 1920
- 1930
- 1940
- 1950
- 1960
- 1970
- 1980
- 1990
- 2000
- 2010
- 2012
Johns–Manville mine, Asbestos, Quebec
In 1964, asbestos industry was determined to fight for its survival.

The asbestos industry recognized that it could no longer succeed in suppressing the evidence of asbestos harm.

It decided to follow the same strategy as the tobacco industry.

It created, financed and controlled its own scientific institute to come up with findings that supported continued use of asbestos.
Alliance with McGill University to legitimise the asbestos industry

QAMA (Quebec Asbestos Mining Association) is seeking an "alliance with some university such as McGill for example, so that authoritative background for publicity can be had."

(Asbestos Textile Institute Minutes, 1965)
QAMA's Purpose in creating an Institute of Occupational Health:

“To preserve the industry on which their business depends.”

The objective behind all this activity by the Q.A.M.A. is, of course, their desire to preserve the industry on which their business depends. Mr. Lindell assured me that they were most anxious to avoid any undesirable publicity or any precipitate action by the U.S.A. or Canadian Federal Government which might be detrimental to the industry.

(Q.A.M.A. Research Institute of Occupational Health in Montreal, Record of discussions of December 14, 1965 meeting)
“All of us are mindful of the rather poor reception given to the efforts of the tobacco industry to set up a council and a scientific committee to deal with the problem of tobacco and its effects on health. Therefore, our Committee emphasized the absolute necessity of existence of a vote power of our Committee over any publicized statements concerning the existence of the Committee and the Institute and its activities.”
Policy and main activity of the Institute of Occupational Health

"(b) be independent of any other institution - university or governmental - so that its policy can be determined by the needs of the industry.

(iii). The main sponsored activity for the next few years will be an epidemiological survey of the Canadian asbestos mining populations by Dr. J.G. McDonald of McGill University.

(1965 QAMA minutes)
“Industry is always well advised to look after its own problems.”

“A first and unanimous recommendation was the carrying out of the epidemiological survey proposed by Dr. McDonald.

The consensus of opinion seemed to point out that the QAMA should take into its hands the ways and means to conduct the necessary research instead of doing it through universities or letting it fall in the hands of the Government.

As an example, it was recalled that the tobacco industry launched its own program and it now knows where it stands. Industry is always well advised to look after its own problems.”

(1965 QAMA minutes)
McDonald's work helped save the asbestos industry

McDonald claimed that his research showed that chrysotile asbestos is essentially “innocuous” and that, except at astronomical exposure levels, “adverse effects on health will not occur”.*

The industry cited McDonald's work to promote chrysotile asbestos, claiming that it could be “safely used”.

McDonald actively helped the asbestos industry to defeat safety regulations and the banning of asbestos.

McDonald plotted with the asbestos industry to hide critical medical evidence

McDonald encouraged the industry:
- to suppress critical X-rays showing harm to workers and
- to attack Selikoff for requesting the X-rays.

Dinner Meeting (June 27, 1973) with Dr. J. Corbett McDonald.

We reviewed the Lewinsohn-Selikoff matter with Dr. McDonald who is on sabbatical leave from McGill University, Montreal. He was in full accord with our strategy and thought the idea of a strong letter to Selikoff from Lewinsohn-Holmes was excellent.
Exposing the “Myth” of ABC, “Anything But Chrysotile”: A Critique of the Canadian Asbestos Mining Industry and McGill University Chrysotile Studies

David Egilman, MD, MPH, Corey Fehnel, AB, and Susanna Rankin Bohme, AM

Background Beginning in the 1930s, the Canadian asbestos industry created and advanced the idea that chrysotile asbestos is safer than asbestos of other fiber types. Methods We critically evaluate published and unpublished studies funded by the Quebec Asbestos Mining Association (QAMA) and performed by researchers at McGill University. Results QAMA-funded researchers put forth several myths purporting that Quebec-mined chrysotile was harmless, and contended that the contamination of chrysotile with oils, tremolite, or crocidolite was the source of occupational health risk. In addition, QAMA-funded researchers manipulated data and used unsound sampling and analysis techniques to back up their contention that chrysotile was “essentially innocuous.” Conclusions These studies were used to promote the marketing and sales of asbestos, and have had a substantial effect on policy and occupational health litigation. Asbestos manufacturing companies and the Canadian government continue to use them to promote the use of asbestos in Europe and in developing countries. Am. J. Ind. Med. 44:540–557, 2003. © 2003 Wiley-Liss, Inc.
1972: McDonald helps asbestos industry to defeat stricter safety controls in US

In 1972, the occupational exposure regulations were 2 fibres per cubic centimetre of air (2 f/cc) in the UK, 5 f/cc in the US, 10 f/cc in Quebec.

The US National Institute of Occupational Safety & Health (NIOSH) recommended that the US standard be changed to 2 f/cc.

The asbestos industry and McDonald testified at the OSHA hearing, arguing against stricter exposure standards. The industry said stricter standards would cost them too much money. McDonald argued in favour of exposure standards of 5 to 9 f/cc.

In testifying, Prof. McDonald stated: “I do not work, nor am I associated with any asbestos producer or manufacturer.”

This was completely untrue. McDonald and McGill had received a million dollars from QAMA. McDonald worked closely with the asbestos industry.
The proposed safety measure was defeated

The asbestos industry rejoiced:

“The OSHA has been of enormous concern to the industry over the past 18 months... the Association expended tremendous efforts during the 6 month period leading to the promulgation of last June’s OSHA standards on asbestos. I think it is a gauge of the effectiveness of the total industry involvement in this most crucial matter that of the eleven main requirements in the standards, the industry position was accepted totally by OSHA on 9 of the 11.

Next to OSHA, the EPA has the greatest potential of any federal agency for adversely affecting the future of the asbestos industry in this country.”
Impact on workers

In the 1970s, workers in Canada and the US were desperately trying to get stricter regulations over worker exposure to asbestos.

In 1975 workers at Thetford Mines, Quebec went on strike for better safety protections.

In 1977 workers at the Johns-Manville chrysotile asbestos mine in Newfoundland went on the longest strike in Canadian history for stricter occupational health protections.

McDonald’s research was used by the asbestos industry as a powerful weapon to defeat workers' efforts for stricter controls over their exposure to asbestos.
1974, Selikoff: Working conditions of Quebec workers “the worst on the continent”

Figure 1. Irving Selikoff’s findings about the association between asbestos and lung disease prompted him to become a public health crusader and work tirelessly to advocate for the regulation of asbestos. Photos of Irving Selikoff ©Earl Dotter; www.earldotter.com.

In the 1960s, Selikoff quantified the health effects of asbestos exposure in the workplace by documenting asbestos-related diseases among industrial workers. In 1974, he joined a team of doctors examining miners at Thetford Mines in Quebec, which he described as having the worst working conditions on the continent.

(Canadian Environmental Health Atlas)
McDonald helps defeat EPA ban on asbestos

Montreal, April 22, 1986
McDonald also helped the tobacco industry...

but he wanted it kept secret.
October 28, 1988

Dr Dunn
Imperial Tobacco Limited
3810, rue St-Antoine Street
Montreal, PQ, H4C 1B5

Dear Dr Dunn,

Here is our review of the paper by Collishaw, Tostowaryk and Wigle published recently in the Canadian Journal of Public Health.

The epidemiological and statistical issues were quite complicated; we hope we have dealt with them clearly. If further explanation is needed please let us know.

As agreed, our fee for this work is $10,000. We would be grateful if the payment could be made to McGill University, Account 1#743-53 and the cheque sent to Dr Nicola Cherry at this address.

With kind regards.

Yours sincerely,

J Corbett McDonald, MD FRCP
Professor

PS. I would wish to emphasis that there must be no publication of any part of this review under our name, and if any part of it should be published no reference should be made to us by name.
Canada asks World Trade Organization to prohibit the banning of chrysotile asbestos

In 1998, the Canadian government, on behalf of the asbestos industry, asked the World Trade Organization to remove the right of countries to ban chrysotile asbestos.

The case was against France, but in reality was aimed at countries in the Global South, where Canada was aggressively marketing asbestos.

At the WTO tribunal, McDonald was a scientific adviser for Canada.

McDonald testified that at levels below about 25 fibres per c.c. for forty years' work, we could not detect an increase in lung cancer and argued that chrysotile asbestos can be safely used.
Asbestos marketed to developing countries

The International Chrysotile Association, based in Montreal, continues today to aggressively market asbestos to developing countries.

Scientists, financed by the asbestos industry, help sell asbestos, claiming McDonald's's research shows it is “virtually innocuous.”
The industry claims to have achieved a 99.81% success rate in “safe use” of chrysotile asbestos.
“Safe use” of asbestos in India

The Canadian Broadcasting Corporation went to India and filmed workers, covered in asbestos, with only a bandana a protection.

CBC The National, "Canada's Ugly Secret", June 2009
India, Worker Cutting Asbestos Cement Sheets
Indonesia: Local people collecting broken asbestos cement pieces outside factory
McGill University asked to carry out a thorough, independent and transparent investigation

February 2012

“We call on McGill University to carry out a thorough, independent and transparent investigation of the allegation that the Quebec asbestos industry had improper influence over the epidemiological research carried out by Prof. J. C. McDonald and his unit at McGill; that the research is flawed, lacks transparency and contains manipulated data; that requests for the study data to be released have been refused; that the research minimized the threat to health posed by chrysotile asbestos; and that Prof. McDonald and others at times denied that the asbestos industry was funding the research.”
McGill continues its complicity

Asbestos: a continuing failure of ethics by McGill University


McGill carried out a biased, internal review that disregarded and suppressed the evidence.

McGill stated that McDonald’s research had ‘‘led to the near complete disappearance of the asbestos industry in the developed world and the universal recognition of the toxicity of the product.’’

This statement is the opposite to the truth.
Scientists funded by the asbestos industry continue to promote asbestos use

*The health risk of chrysotile asbestos*

“Chrysotile produces little effect, and with controlled use it can be used safely.”

David M. Bernstein, Current Opinion, Pulmonary Medicine, July 2014

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D.M.B. has appeared as an expert witness in litigation concerned with alleged health effects of exposure to chrysotile.

**Conflicts of interest**
There are no conflicts of interest.
Bernstein forced to disclose his ties to the asbestos lobby

ERRATUM

Current Opinion in Pulmonary Medicine, September 2014

Dr Bernstein would like to take this opportunity to clarify that he works as a scientific consultant to the chrysotile asbestos industry and gives presentations worldwide on the science of chrysotile asbestos. In the last three years he has received payment for his consultancy services from: Honeywell, International Chrysotile Association and Zimbabwe National Chrysotile Taskforce.
Problem of industry influence is widespread

Special report: Scientists critical of EU chemical policy have industry ties

By Stéphane Horel and Brian Bienkowski, September 23, 2013

Seventeen scientists who have criticized plans in Europe to regulate endocrine-disrupting chemicals have past or current ties to regulated industries.

An investigation by Environmental Health News reveals that of 18 toxicology journal editors who signed a controversial editorial, 17 have collaborated with the chemical, pharmaceutical, cosmetic, tobacco, pesticide or biotechnology industries. Some have received research funds from industry associations, while some have served as industry consultants or advisors.
British Medical Journal adopts policy of zero tolerance on education articles with financial links to industry.

“However we cannot ignore the mounting evidence of systematic attempts by commercial interests to corrupt the literature and influence clinical decisions.

Recently we introduced more active management of competing interests, requiring authors to complete a more detailed declaration and excluding authors with close ties. Now we have decided to go a step further, as heralded three years ago.3 From next year our clinical education articles will be authored by experts without financial ties to industry.”

Editorial, *BMJ* 2014;349:g7197 doi: 10.1136/bmj.g7197 (Published 28 November 2014)