



ADVISORY

Volume #1, Issue #22

August, 1984

CANADIAN ROYAL COMMISSION LINKS NO HEALTH RISKS TO INGESTED ASBESTOS, SAYS CONCERN "NOT JUSTIFIED"

An Ontario Royal Commission investigating the safety of asbestos recently concluded that the mineral's health effects are linked solely to inhalation, not ingestion. The Commission's findings are based on an exhaustive, four year analysis of the medical and scientific literature. Sworn testimony by "an international who's who of asbestos experts" was presented during fifty days of formal hearings. Experts under contract and the Commission's staff also conducted research on asbestos-related matters.

The findings, released in May, 1984, are considered the most comprehensive independent examination of asbestos and its potential health effects. The report makes a number of important observations about asbestos in drinking water.

The fibres (in drinking water) are almost invariably extremely short, that is, below 1 micron in length. The small dimension of these fibres, coupled with our finding that asbestos disease is occasioned by inhalation rather than ingestion, leads us to conclude that asbestos in drinking water is not a health hazard.

It would appear that fibres entering the body through inhalation and ingestion are dealt with quite differently. Fibres which are swallowed tend to pass right through the gastrointestinal tract and be immediately removed. Fibre penetration of the tissue or lining of the gut following ingestion is speculative at best.

In summary, we find that oral ingestion of asbestos in concentrations currently found in water, food, or beverages in North America is not associated with any significant increase in disease. Although negative epidemiological studies cannot conclusively prove that there is no association, the populations studied have been sufficiently large that all but the smallest health effects would have been detected. For their part, the bulk of the animal studies have shown no association between oral asbestos ingestion and gastrointestinal cancer.

In its summary of the report, the Royal Commission concludes:

The Commission links the health hazards of asbestos to inhalation, not swallowing. Neither biological nor epidemiological evidence indicates that swallowing asbestos creates a health risk. In addition, the fibres found in water, often numbering millions per litre, are very short. The Commission concludes that concern about asbestos in drinking water, beverages and food is not justified.

The Royal Commission on Matters of Health and Safety Arising from the Use of Asbestos in Ontario was created in April, 1980 by the Minister of Labour, Robert E. Elgie, M.D. J. Fraser Mustard, M.D., Ph.D., F.R.C.P., (C), F.R.S.C., Vice President of Health Sciences and Professor of Pathology at McMaster University, and President of Canadian Institute for Advanced Research, and Robert J. Uffen, Ph.D., P. Eng., F.R.S.C., immediate past Dean of the Faculty of Applied Sciences at Queen's University, served as Commissioners. J. Stefan Dupre, Ph.D., D. Sc. Soc., LL.D., Professor of Political Science at the University of Toronto, chaired the group.

The three-volume, 900 page report is available for \$25 (U.S.) from the Ontario Ministry of Government Services, Publications Services Branch, Fifth Floor, 800 Bay Street, Toronto, Ontario, Canada M7A 1N6. Checks should be made out to the Treasurer of Ontario.