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THE ASBESTOS INSTITUTE

COMMUNIQUE

PROFESSOR SIEMIATYCKI OBJECTS TO THE MODEL USED IN THE EPA'S ANALYSIS

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both a researcher and a teacher
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A Questionable Analytical Model

Professor Siemiatycki of the Institut Armand Frappier criticizes the mathematical model of the "linear non-threshold dose/response" type used by the EPA. He thinks that the American agency never proved that this was the most coherent model available.

The Montreal researcher criticizes the specific parameters of the model selected because they are based on measurements conducted among a single group of workers in the 1960's. Since the data used contain no individual measurements and are based on an identical average exposure for all workers, Prof. Siemiatycki concludes that the basic parameters of the model constitute only crude approximations.

Moreover, the researcher thinks that the fact of selecting a single model and a single study seems to give the EPA estimates a degree of accuracy which they do not deserve. According to the Institut Armand Frappier epidemiologist, a credible model would express the calculations of risk in terms of order of magnitude. He believes that the parameters for which we have only rough estimates should also be treated the same way.

Dubious Scientific Bases

Prof. Siemiatycki blames the EPA for thinking that all types of asbestos are equally harmful, which in his opinion adds yet another element of uncertainty to the validity of the Agency's conclusions. The researcher notes that current knowledge seems to indicate that chrysotile is less hazardous per unit than other types of asbestos.

The American agency states that asbestos is one of the most frequently studied potentially carcinogenic agents and that this confirms the validity of its conclusions. Prof. Siemiatycki says that this statement is tendentious. In most cases, the works cited are retrospective studies of groups of subjects for whom data on the degree of exposure are at best approximate. Most of these studies do not take into account factors such as smoking habits, ethnic origin, or urban and social environment.

Costly Speculation

The epidemiologist concludes that banning asbestos would be a costly speculation. He thinks that the thesis that substitute products are less hazardous would not stand up to an in-depth study. Prof. Siemiatycki notes that American and European studies of workers exposed to synthetic fibres show risks of lung cancer comparable to those of asbestos.

Prof. Siemiatycki calculates that the price to be paid is disproportionate with the results one could hope to obtain. "From the point-of-view of public health, it would be much more profitable to invest in anti-smoking and anti-drinking campaigns, in transportation safety and other community health measures," he writes.