

World Symposium draws delegates from 60 countries

Asbestos: should use be controlled or banned?

During a three-day period in Montreal late last month, internationally-recognized authorities from the five continents debated not only the scientific, but also social and economic issues pertaining to asbestos and asbestos use, at the World Symposium on Asbestos: Asbestos, Health and Society.

That this was one of the broadest-ranging conferences ever held on the subject was made clear by Dr Irving Selikoff of the Mount Sinai School of Medicine (New York), who contrasted the diversity of issues to be addressed in Montreal with the singularly scientific focus of a 1964 international conference convened in New York by the New York Academy of Sciences. At that time, he pointed out, it was still believed that expanded scientific knowledge and data would lead to control of the disease hazards of asbestos.

This optimism has gradually eroded, in the light of continuing asbestos disease and widespread doubt regarding the achievement of control over the hazard. And the fact that the Montreal Symposium is addressing the question of whether or not asbestos use should be continued "is a measure of our past inadequacies and current uncertainties," Dr Selikoff stated. In addressing this question, he added, the meeting, while still science-based, must also consider the economic, political, social, administrative and ethical problems associated with the continued and projected use of asbestos.

Progress in scientific research since 1964 has led to a much greater understanding of questions relating to asbestos disease, he continued. With respect to the spectrum of asbestos-related disease, for example, studies have indicated that the major concerns are lung cancer, mesothelioma, asbestosis and gastrointestinal cancer. The number and range of populations at risk have also been greatly expanded, to take into account more than asbestos workers alone (e.g. miners, millers, product manufacturing workers). Workers in the construction industry (especially insulation workers) and in shipyards have also

come to be included in the at-risk category.

Subsequent studies have even further expanded the potential for disease and the necessity for controls (e.g. chemical plants, refineries, power production plants and utilities). Finally, using the incidence of mesothelioma as a marker, has come evidence that families of exposed workers are also at risk, Dr Selikoff noted.

The question of latency has also taken on a new aspect, as it has become clear that there is a definite difference between "duration of exposure" and "duration from onset of exposure". Dr Selikoff explained that it has become evident that with asbestos exposure of sufficient intensity, only short-term exposure is needed to yield long-term risk. "We have not yet learned how to loosen this iron grip of latency," he stated.

This point was reinforced by Dr William Nicholson, also of the Mount Sinai School of Medicine, who noted that the risk of disease, such as lung cancer, will remain long after the onset of exposure. He said studies have indicated a linear pattern in dose-response relationships, and recommended that such a pattern be used in making any estimates of asbestos-related health effects.

Dr Nicholson estimated that between 1940 and 1979, approximately 27.5 million people sustained occupational exposure to asbestos, with most of these exposures of a low-level or short-term nature. He said that in his opinion, the number of documented cases of mesothelioma during that period have totalled only one-third of the number of cases that will eventually appear.

Surveillance program problems

Problems associated with running medical surveillance programs for workers exposed to asbestos were outlined by Dr Clark Cooper, a San Francisco-based occupational health consultant, who has been involved for the last 14 years in supervising such a medical surveillance program for construction industry insulation workers in the