

BOOK REVIEWS

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The Health Effects of Chrysotile Asbestos. By R. P. Nolan et al. Published by Mineralogical Association of Canada, 2001. ISBN: 0-921294-41-7. 304 pp. \$38.00.

This book is a collection of papers following the proceedings of an international workshop on the health effects of chrysotile asbestos and the contribution of science to risk management decisions. There are a number of editors, and although the workshop took place in 1997, the publication is dated 2001. The preamble is given by Robert Martin, the editor of *Canadian Mineralogist*, and one assumes from the nature of the book that this is intended for an audience which includes occupational physicians with a specialist interest in asbestos issues, as well as chest physicians, toxicologists and individuals from other scientific fields.

The book is divided into five sections. The first part deals with papers relating to exposure to amphibole asbestos and mixed fibres. It includes the health experience of some US and Canadian workers exposed to asbestos as well as environmental exposure, and a case study of an asbestos cement production plant in Italy with respect to pleural malignant mesothelioma. The section is concluded with a discussion and a summary of the papers presented at the workshop.

Part two deals with exposure to commercial chrysotile, looking at its mineralogy, modern products and exposures. The first paper in the section deals with the occurrence, production and uses of asbestos, other papers looking at workplace monitoring in the chrysotile asbestos industry and the concentration of asbestos fibres in the general environment resulting from the use of modern high-density chrysotile asbestos-based products.

Part three, which is probably of more interest to the occupational physician, deals with the mechanisms of mesothelioma and lung cancer. The papers look at the idea that the simian virus 40 may have some influence as either a stimulator or modulator of the development of malignant mesotheliomas. Two of the papers discuss this issue with discussion and analysis thereafter.

Part four deals with exposure to commercial chrysotile and the historical perspectives of the health effects. Case studies looking at the health effects of chrysotile asbestos are dealt with in the mining industry in Quebec, the asbestos chrysotile mine in Italy and the mining of chrysotile in Russia. There is a detailed analysis of 247 cases of pathological findings in the lungs of long-term

chrysotile miners in Quebec. There are also shorter articles dealing with the health experience of chrysotile asbestos cement workers in India and the impact of asbestos on environmental health in Japan.

Finally, part five deals with exposure to commercial chrysotile and the modern perspectives on health effects. Here, there are papers looking at the toxicological insights into low level exposure to chrysotile and the recognition of health effects of low level exposure. A risk assessment for asbestos and the management of low levels of exposure to chrysotile is also submitted.

This is a difficult book to read, as the papers are complex and go into great detail about very specific subjects. I have absolutely no quibbles with respect to the scientific or factual quality of the book, which comprehensively evaluates both historical and modern perspectives on the influence of chrysotile asbestos. As one would expect from an international workshop, there are various conflicting views as to whether chrysotile asbestos is a significant hazard with respect to human health, and some papers argue that low-level exposure to chrysotile may not necessarily be a significant hazard.

Conclusion

This is certainly a very useful book for occupational physicians who may have a specific interest in asbestos, as within the pages there are some interesting facts and pieces of information, both anecdotal and scientific. In my own experience as an occupational physician, I found one of the articles concerning the concentration and type of asbestos fibres in the air inside buildings to be of significant interest. I had also not been aware that as many as 30% of cases of mesothelioma seem not to have resulted from exposure to asbestos fibres. In addition, there are some useful papers and discussions with respect to the value of regular screening, which is something I found of interest with respect to my asbestos workers. The book is relatively good value, but would only be of interest to people who have specific questions that need to be addressed, and in that regard I rate the book as being useful as a reference only publication.

Rating

☆☆ (Reference only)

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