

IS CHRYSOTILE ASBESTOS EXPOSURE A SIGNIFICANT HEALTH RISK TO THE GENERAL POPULATION?

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SUMMARY

The main unresolved issues concerning environmental exposure to chrysotile asbestos of the general population are discussed.

A review of the results of the measurement of airborne chrysotile fibres in buildings is presented showing that the results have been consistently low with the exception of buildings with damaged friable asbestos-containing material. Quantitative risk assessments are presented indicating that the lifetime risk is small compared to many other environmental risks.

Possible adverse health effects of paraoccupational exposures in the case of high domestic airborne asbestos levels cannot be excluded.

Both on the basis of electron microscopy analyses of asbestos exposures at locations with heavy traffic, and the very shallow slopes in the exposure-response relationships for increased lung cancer risk, the conclusion is drawn that exposure to airborne asbestos-containing friction materials has not been proven to pose a significant health risk to the general population.

Reviewing animal ingestion studies published and all the available epidemiological studies related to asbestos in drinking water, the conclusion is drawn that the carcinogenic risk in the general population is low even in the case of drinking water containing elevated concentrations of chrysotile asbestos.

Key words: chrysotile asbestos, asbestos exposure in buildings, exposure to asbestos friction products, asbestos in drinking water

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