

# The scientific basis of a total asbestos ban

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## KEY WORDS

Asbestos; carcinogenicity; mesothelioma

## SUMMARY

*Worldwide, in the new millennium, standards for the protection of workers and the general population from asbestos risks are not equally stringent in all countries. The present review analyzes some arguments which in recent years have been proposed as a rationale for the reconsideration of the scientific background of a total asbestos ban, such as that adopted in the European Union. The conclusion is that in order to ensure adequate protection, there is no alternative to a total ban. The evidence for carcinogenicity of chrysotile is as good as for the amphiboles, the carcinogenic potency of chrysotile is lower than that of the amphiboles, but risk estimates must also be based on extent of exposure (nowadays chrysotile represents 95% of asbestos used worldwide). The fact that induction of mesothelioma by asbestos results from the interaction of environmental exposure and genetic factors reflects a general phenomenon in carcinogenesis and does not warrant any re-consideration of the role of asbestos. The role of SV40 as yet is unclear: even assuming that current risk estimates are correct (which is debatable), this agent would interact with asbestos in only a fraction of mesothelioma cases. The effectiveness of protocols suggested for "controlled use" has not been tested with a scientific approach: they seem hardly practicable, particularly in the countries which are currently the major consumers of asbestos.*