บทความพิเศษ

Asbestos and Mesothelioma in Thailand*

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Abstract

Chrysotile, or white asbestos, is a fibrous silicate mineral in the serpentine group of phyllosilicates. It has been used in a number of Thai industries for several decades. However, the material is known to be carcinogenic to humans, especially affecting the serous lining of cavitary organs, producing the rare and highly malignant tumour known as mesothelioma. Yet in almost six decades (1954–2011) there have been only 57 known mesothelioma cases in Thailand, and none of them showed pathological evidence of asbestos etiology; a single case among them had a history of asbestos exposure in a factory. The first patient was diagnosed in 1954 as a case of tunica vaginalis. The first reported case occurred 14 years thereafter.

Studies concerning asbestos in Thailand have been few, almost all of them being carried out under my guidance, i.e., surveys for asbestos bodies in 330 randomized autopsy lungs; determination of airborne asbestos dust in areas of Bangkok with heavy street traffic; verification of asbestos as a contaminant in vermiculite, which is used in horticulture as a planting medium; and durability testing of asbestos and non-asbestos cement roof tiles. Details are described in the text.

Key words: chrysotile, asbestos, vermiculite, mesothelioma, Thailand

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Conclusions

Despite the concern of governmental authorities charged with controlling the use of asbestos in industrial processes, it must be noted that there has been no proven case of Thai citizens suffering from any kind of exposure to asbestos.

Studies on the strength and durability of asbestos and non-asbestos roof tiles are as yet contradictory, but a supporting study is in progress.

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