

Letter to the Editor

Asbestos Found in Lungs of Half the Thailand Population

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Almost 50 percent of the general population in Thailand may die with at least traces of asbestos in their lungs, based on two studies^{1,2}. Chrysotile fibers were discovered in the lungs of nearly 50% of those who were part of two post-mortem analysis done by two Departments of Pathology, Mahidol University in Bangkok.

The toxic mineral was found during autopsies that were performed at two hospitals without regard to occupation, age, sex or cause of death. A six-month-old infant and a two-year-old infant, were the two youngest subjects to have asbestos fibers identified in the lungs. The prevalence of asbestos is increasing compared between the two studies in Thailand and the findings implied that Thai people at large were being exposed to increasing amount of asbestos fibers floating in the ambient atmosphere. The pollutants were likely being released from the roof tiles and siding of aging houses during rough weather.

Thailand has been one of the world's largest importers and users of asbestos for several decades, trailing only Russia, China, India and Kazakhstan in annual consumption. Thailand did finalize a partial ban on certain types of asbestos in 2001, following numerous worldwide studies documenting the relationship between the toxic mineral and respiratory diseases.

There are questions regarding asbestos exposure in Thailand during the periods of the first study over 30 years ago and during the period of the second study, namely why were only few cases of asbestos-related diseases, especially pleural mesothelioma, being reported in the country, in contrast to the general belief that exposure to even a

small amount of asbestos would readily cause asbestos-related diseases. The phenomenon may be explained by the fact that Asians are less likely to develop asbestos-related diseases. The phenomenon has been explained by the fact that Asians are less likely to develop asbestos-related diseases because they lack susceptibility genes needed for the development of the conditions.

References:

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2. Incharoen P, Hama T, Arsa L, et al. Asbestos bodies burden in the autopsy lung tissue from general Thai population. *The Open Respir Med J* 2019; 13:5-10.