

Potential Health Hazards Associated With Exposures to Asbestos-Containing Drywall Accessory Products: A State-of-The-Science Assessment

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Abstract:

Until the late 1970s, chrysotile asbestos was an ingredient in most industrial and consumer drywall accessory products manufactured in the US. In 1977, the Consumer Product Safety Commission (CPSC) issued a ban of consumer patching compounds containing “respirable, free-form asbestos” based on their prediction of exceptionally high rates of asbestos-related diseases among individuals using patching compounds for as little as a few days. Although hundreds of thousands of workers and homeowners handling these products may have experienced exposure to asbestos prior to the ban, there has been no systematic effort to summarize and interpret the information relevant to the potential health effects of such exposures. In this analysis, we provide a comprehensive review and analysis of the scientific studies assessing fiber type and dimension, toxicological and epidemiological endpoints, and airborne fiber concentrations associated with joint compound use. We conclude that: 1) asbestos in drywall accessory products was primarily short fiber (< 5 µm) chrysotile, 2) asbestos in inhaled joint compound particulate is probably not biopersistent in the lung, 3) estimated cumulative chrysotile exposures experienced by workers and homeowners are below levels known to be associated with respiratory disease, and 4) mortality studies of drywall installers have not demonstrated a significantly increased incidence of death attributable to any asbestos-related disease. Consequently, contrary to the predictions of the CPSC, the current weight of evidence does not indicate any clear health risks associated with the use of asbestos-containing drywall accessory products. We also describe information gaps and suggest possible areas of future research.

Keywords: Joint compound, joint cement, drywaller, drywall finisher, taper, chrysotile, mesothelioma, CPSC