

From: Donna Hand
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Subject: Fwd: Title Details: Workplace exposure to asbestos review and recommendations

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Subject:Title Details: Workplace exposure to asbestos review and recommendations
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Workplace exposure to asbestos review and recommendations

by National Institute for Occupational Safety and Health.

Title Workplace exposure to asbestos review and recommendations

Author National Institute for Occupational Safety and Health.

Corporate Author National Institute for Occupational Safety and Health.

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Physical Description 42 p.

Abstract Occupational exposure to asbestos (1332214) was reviewed. Recommendations on monitoring and limiting exposure to asbestos proposed by a joint NIOSH/OSHA asbestos work group were discussed. These included lowering the current standard of 2,000,000 fibers per cubic meter (f/m³) to 100,000f/m³ for fibers longer than 5 microns for an 8 hour workday, and using electron microscopy to supplement optical microscopy in identifying asbestos fiber types. Asbestos nomenclature and definitions were reviewed. Asbestos sampling and analysis were discussed. The biological effects of exposure to asbestos in animals were reviewed. Studies have shown that chrysotile (12001295) is as potent as crocidolite (12001284) in inducing mesotheliomas after intrapleural injection and pulmonary neoplasms after inhalation exposure. It has not been possible to establish a fiber length below which there is no carcinogenic risk by inhalation. The biological effects of exposure to amosite (12172735), chrysotile, crocidolite, and mixed fiber types in humans were reviewed. Occupational exposure to all commercial asbestos fiber types has been shown to be associated with high risks of asbestosis, lung cancer, and mesotheliomas. A number of epidemiological studies have indicated that asbestos causes cancer at extrapulmonary sites such as the stomach, esophagus, colon, larynx, and buccal cavity. No evidence of a threshold or safe level of exposure has been found. Smoking and asbestos exposure combined has been shown to cause a multiplicative effect on the risk of lung cancer. The effects of exposure to asbestiform minerals other than commercial asbestos were discussed. Studies have indicated that the risk of lung cancer appears to be linearly related to cumulative asbestos exposure. It was emphasized that the existing data do not support the existence of a threshold for asbestos exposure.

Subject Term Asbestos industry -- Health aspects. Asbestos fibers. Lungs -- Cancer.

Added Corporate Author United States. Occupational Safety and Health Administration

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