



Target Health Hazards

Asbestos: Airborne Danger

by Nancy L. Nelson

Two thousand years ago when the first use of asbestos was recorded, it was a sacred object, a curiosity of kings and nobles, a magic mineral. The Greeks, who used asbestos for the wicks of their temple lamps, were enthralled when flames did not consume it, but burned unceasingly. Amazed, they called it *asbesta*, which meant the "unquenchable," the "inextinguishable."

Now that asbestos has been integrated into our industrial world—from fireproof drapery and floor tiles to the corrugated steel used in heavy construction—the term used by the Greeks has been found to apply to another attribute of this mineral. No cure now exists for the diseases caused by inhaling asbestos fibers: once established, these disorders, too, have so far proved to be inextinguishable.

In the last few years, asbestos has been recognized as one of the most hazardous of air contaminants in the workplace. Employees exposed to asbestos include an estimated 100,000 insulation workers, 50,000 workers in manufacturing products, 60,000 using end products, and uncounted thousands in construction. Labor unions have

pushed for stricter standards governing its usage, and the Occupational Safety and Health Administration has listed it as one of five target health hazards in a new program aimed to crack down on health hazards in the workplace.

Recent studies, such as those conducted by the Mount Sinai School of Medicine and the National Research Council, have produced some disturbing statistics on the mortality rates of workers using asbestos. Dr. Irving J. Selikoff of the Mount Sinai School of Medicine discussed the implications of these studies: "At present, one in every five deaths among insulation workers is due to lung cancer, one in ten to cancer of the pleura or peritoneum, one in ten to scarred lungs of asbestosis." Since insulation workers receive relatively light exposures to asbestos compared to some other occupational groups, these results are even more sombre.

What disturbs researchers about diseases linked to asbestos is that many cases they are presently encountering result from exposures dating back to the 1930's, when asbestos was not used as extensively as it is today. Thirty years ago world production was approximately 50,000 tons annually; today it has skyrocketed to 3 million tons. The effects of exposures occurring in the 1970's probably

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