bestos textile industry at about the level as that in the other industries studied here then it might be argued that the effects of asbestos dust exposures on mortality are considerably greater than the 21% increase shown.

It should be noted that this study covered at most a 16½-year follow-up and there may be more striking health effects of exposure to asbestos dust over a longer period. Some workers had, of course, been working for a considerable period in the asbestos products industry when they first entered the cohort. Others had only recently been employed. Many workers left the industry shortly after they entered the cohort. The duration of exposures cannot, therefore, be defined.

The question of the effects of low levels of asbestos dust exposure on disease is important. Some effects are detectable on lung cancer mortality and on mortality from certain respiratory diseases even in the asbestos building products industry, where apparently overall exposures are minimal. It seems likely, however, that these exposures are greatly in excess of those in urban communities and if very low-level exposures of populations to asbestos dust play any part in the pathogenesis of disease it must be very small indeed.

Summary

A study was conducted on the mortality experience up to 16½ years of 21,755 white males in three asbestos products industries and comparisons were made with the mortality experience of 6,281 white males in an industry without asbestos dust exposures and with the mortality experience of the entire US white male population.

An elevated death rate for all causes was found only among workers in the asbestos textile industry, an industry which has probably had heavy asbestos dust exposures. The other two asbestos products industries—asbestos building products and asbestos friction materials—probably had considerably lower levels of asbestos-dust exposure, and here death rates for all causes were below those experienced in all US white males, and nearly identical to those among workers in the industry without asbestos-dust exposures.

Increased mortality among workers in the asbestos textile industry was due to excess deaths from cancer of the respiratory system, cancer of the digestive system, a category of heart disease which includes cor pulmonale, and asbestosis.

Despite low mortality for all causes among workers in the asbestos building products and asbestos friction materials industries, these workers had slightly increased death rates for cancer of the respiratory system and a high death rate from asbestosis.

It is believed that asbestos dust exposures among workers in the asbestos building products industry and the asbestos friction materials industry greatly exceeded those in modern urban communities, and that the modest response of the workers in these industries indicates that asbestos dust at levels to which general populations are exposed probably is of little importance in the etiology of disease.

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