

## OCCUPATIONAL AND ENVIRONMENTAL MEDICINE

### Asbestos workers at significantly increased risk of heart disease/strokes

*Risk is higher even after taking account of smoking*

[Cardiovascular disease mortality among British asbestos workers (1971-2005) Online First doi 10.1136/oemed-2011-100313]

Workers exposed to asbestos as part of their job are at significantly greater risk of heart disease and stroke than the general population, finds research published online in ***Occupational and Environmental Medicine***.

Women seem to be at greater risk than men, the research indicates.

It is well known that asbestos workers are already prone to serious lung disease, such as mesothelioma and asbestosis, as a direct result of their exposure to asbestos fibres.

The researchers set out to explore the impact of asbestos as an inflammatory agent on the risk of heart disease and stroke, given that inflammation is now known to have a role in cardiovascular disease.

They analysed cause of death among just under 100,000 asbestos workers taking part in regular voluntary health monitoring and answering questions on levels of exposure for the Asbestos Workers Survey.

The average monitoring period was 19 years, with the average age on the date of the first medical examination being 35.

Most of the men taking part in the survey worked in asbestos removal while most of the women worked in manufacturing.

Over half of the men (58%) and women (52%) were smokers at the time of their first medical examination, proportions which had fallen only slightly (55% and 49%) at the time of their last medical examination. Smoking is a known risk factor for heart attack and stroke.

The research team compared the number of deaths from stroke and heart attacks among these workers between 1971 and 2005 against the number that would be expected to occur in the general population (standardised mortality ratios).

During the study period, 15,557 people died from all causes. Stroke accounted for just over 1000 deaths while heart disease accounted for another 4000.

Based on the standardised mortality ratios, asbestos workers were significantly more likely to die of cardiovascular disease than the general population, even after taking account of smoking.

Male asbestos workers were 63% more likely to die of a stroke and 39% more likely to die of heart disease. The corresponding figures for women were, respectively, 100% and 89%.

And there was some evidence that the longer the duration of exposure to asbestos, the greater was the likelihood of dying from heart disease, even after taking account of smoking.