



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

WASHINGTON, D.C. 20201

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SURGEON GENERAL
OF THE
PUBLIC HEALTH SERVICE

PHYSICIAN ADVISORY - HEALTH EFFECTS OF ASBESTOS

The results of recent studies of shipyard workers have increased concern about the health effects associated with previous occupational exposure to asbestos. This advisory notice will assist you in dealing with inquiries from your patients and other members of the public.

Asbestos refers to a group of widely used fibrous minerals. Significant exposure of men and women employed in shipyards is known to have occurred, even among those not directly working with asbestos. Exposure to asbestos can also occur in many settings, such as, direct mining and manufacturing; construction; insulation; roofing; demolition; brake lining; and the manufacture and installation of asbestos pipe, sheets, panels, paper products, friction materials, textiles, floor tiles, paints, and gaskets. The risk has been documented extensively for certain occupational exposures, and there are reports that asbestos-associated disease also occurs in household contacts of asbestos workers.

The primary effects of past asbestos exposure are asbestosis, a lung disease, and certain types of cancer, primarily lung cancer and pleural and peritoneal mesothelioma and, less frequently, gastro-intestinal and other cancers. It is now known that the health effects of asbestos appear after a long latent period (15, 25, 35 or more years) after the initial exposure. Exposures as short as a month may result in disease many years later, because the inhaled dust, being mineral, tends to remain in the tissues. It has been noted in studies of heavily exposed workers that approximately 20 to 25 of each 100 deaths among asbestos workers 20 or more years from onset of exposure are found to be from lung cancer, 7 to 10 from mesothelioma, 4 from cancer of the esophagus, stomach, colon/rectum, and some excess cancers of other sites (oropharynx, larynx, and kidney). In addition, in some groups, as many as 7 percent of workers die of a form of pneumoconiosis, asbestosis. Cigarette smoking significantly increases the lung cancer risk of asbestos exposure and aggravates asbestosis.

In dealing with your patients or other individuals who worked in shipyards or believe that they were otherwise exposed to asbestos, you may wish to consider the following issues:

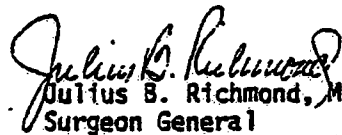
1. Occupational or Exposure History -- A detailed, lifetime history must be obtained. This is time consuming, but important because significant exposures may have been brief (one month) and may have occurred many years ago (i.e., during World War II). Because the World War II work force was comprised of many women as well as men, the potential for female patient involvement should not be overlooked.
2. Careful Management of Lung Disease -- A detailed history for symptoms such as shortness of breath or exertional dyspnea, physical examination, chest x-ray, and pulmonary function tests may be helpful in diagnosing the pneumoconioses associated with asbestos. Early x-ray changes are often subtle so x-rays must be reviewed carefully by experienced readers. Such readings should include a thorough search for pleural changes. Careful attention to and aggressive treatment of respiratory infections may be important in patients with asbestosis. The use of currently effective influenza and pneumococcal vaccines should be considered.
3. Emphasis on Smoking Cessation -- Discontinuation of smoking is an important step in the control of the sequelae of asbestosis and will assist in the prevention of lung cancer. Individuals who smoke and who have been exposed to asbestos have 30 to 90 times the risk of getting lung cancer of individuals who neither smoke nor have been exposed to asbestos and $7\frac{1}{2}$ to 30 times the risk of the non-smoking asbestos workers. Data are available which show that cessation of smoking will significantly diminish the risk of developing lung cancer among asbestos workers.
4. Cancer Surveillance -- The usefulness of screening asymptomatic, exposed individuals for lung, gastro-intestinal and other cancers is now under study in clinical trials. Individuals, however, should be carefully questioned regarding possible symptoms which could be related to cancer: chest pain, hoarseness, hemoptysis, weight loss, melena, etc. If such symptoms are present, an appropriate diagnostic workup should be undertaken.

It is important to note that many people exposed to asbestos -- perhaps a majority -- suffer no apparent ill effects. It is hoped that most of your patients will be in this category.

Current use of asbestos is regulated, but attention must be given to proper ventilation and engineering controls and the use of respirators -- all measures of primary prevention. In the past the dangers of asbestos exposure were not fully appreciated; much exposure occurred in previous decades, particularly in shipyards, where individuals often worked in confined quarters.

A discussion of asbestos and its health effects appears in the March/April issue of Ca, The Cancer Journal for Clinicians and is available through the American Cancer Society, 777 Third Avenue, New York, New York 10017. A more detailed physician information alert will be distributed by the National Cancer Institute through a number of medical journals within the next two or three months including the Journal of the American Medical Association. Additional information including a more detailed series of questions and answers can be obtained by writing to Asbestos, National Cancer Institute, 9000 Rockville Pike, Bethesda, Maryland 20014.

Sincerely,


Julius B. Richmond, M.D.

Surgeon General
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