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BRIEF COMMUNICATION

Asbestos-Related Disease in the Jewelry Industry: Report of Two Cases

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We describe two cases of asbestos-related pulmonary disease in jewelry workers. Exposures occurred during the hand-mixing of asbestos powder used to make jewelry soldering boards.

Key words: asbestosis, asbestos-related pulmonary disease, pleural plaques, soldering, soldering boards

INTRODUCTION

Rhode Island is the capital of the nation's jewelry industry. Thirty thousand of its residents are employed in the manufacture of costume and precious jewelry. Workers in this industry face a number of well-recognized hazards, including exposures to acids, solvents, cyanide, metals, and noise, and risk of accident [Wuraftic and Hickey, 1938; Martin, 1978; Quinn et al, 1980; Jones and Slovin, 1983]. In this paper, we report two cases of asbestos-related pulmonary disease occurring in jewelry workers.

CASE 1

A.T., a 59-year-old man, presented to the Roger Williams General Hospital Occupational Health Service in October 1985. From 1939 to 1982, he spent 8 hours daily making soldering forms (Fig. 1) for use in his family's costume jewelry manufacturing plant. In the process, he hand-mixed asbestos powder, plaster of paris, and water, and shaped the resulting mud into 15 × 15 × 3-cm patties. He then made surface impressions in the mud to hold jewelry pieces for soldering. In preparing for a new soldering job, he routinely rubbed together two forms to obliterate pre-existing impressions and rewet their surfaces before making fresh indentations. When asbestos powder was unavailable, he obtained it by hand grinding asbestos sheets. He wore no

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