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LUNG CANCER AND MESOTHELIOMA DURING PROSPECTIVE SURVEILLANCE OF 1249 ASBESTOS INSULATION WORKERS, 1963–1974 *

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Introduction

In 1963, it was found that a large group of asbestos insulation workers in the New York metropolitan area had experienced unusual mortality during 1943–1962.[1] Six hundred and thirty-two men had been on the union's rolls on January 1, 1943. By December 31, 1962, 262 men had died, nine before reaching 20 years on the job. Of those who died after 20 years from first employment, lung cancer was found in marked excess; 6.02 such deaths had been expected, and 42 occurred. In addition, there were several deaths due to pleural or peritoneal mesothelioma and a modest increase in deaths due to gastrointestinal cancer, where 9.71 were expected and 29 were observed. There were 12 deaths due to pulmonary asbestosis (Table 1).

Table 1

Expected and Observed Deaths among 632 Asbestos Insulation Workers, New York-New Jersey, 20 or More Years After Onset of Work, January 1, 1943 to December 31, 1962

	Expected *	Observed
Total deaths, all causes	196.16	253
Total cancer, all sites	31.44	95
Lung cancer	6.02	42
Pleural mesothelioma	†	3
Peritoneal mesothelioma	†	1
Cancer of stomach, colon, rectum	9.71	29
All other cancers	15.71	20
Asbestosis	†	12
All other causes	164.72	146

* Nine men died before reaching 20 years from first employment. Expected deaths are based upon white male age-specific death rate data of the U.S. National Office of Vital Statistics from 1949 to 1962. Rates were extrapolated for 1943–1948 from rates for 1949–1955.

† Rates are not available, but these diseases are rare causes of death in the general population.

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