TABLE 3

DETAILS OF WORKERS WHO HAD DIED FROM MALIGNANT DISEASE OF THE LUNG, BRONCHUS OR PLEURA (I.S.C. 162, 163)

Subject	Date of Birth	First Employed in Asbestos Industry	Duration of Employment in Asbestos (yr.)	Time from First Exposure to Death (yr.)	Age at Death (yr.)	Cause of Death*
V.J.	1906	1932	4	21	47	Mesothelioma
H.C.	1905	1935	2	26	56	Carcinoma bronchus
L.W.	1913	1936	1	24	49	Carcinoma bronchus
R.M.	1911	1936	7	23	50	Carcinoma bronchus
E.H.	1899	1939	17	17	57	Carcinoma bronchus
F.C.	1858	1946	1	15	73	Carcinoma bronchus
W.B.	1901	1940	1	19	58	Adenocarcinoma
T.L.	1899	1948	1	14	63	Carcinoma bronchus
W.J.	1887	1950	4	10	73	Carcinoma bronchus
T.V.	1907	1950	1	8	51	Carcinoma bronchus
W.T.	1889	1945	1	7	63	Carcinoma bronchus
E.W.	1877	1941	1	5	69	Carcinoma bronchus

TABLE 4

DISTRIBUTION OF DEATHS AT ALL AGES BY CAUSE, IN MEN WHO WERE ALIVE 15 YEARS AFTER THEIR FIRST EXPOSURE TO ASBESTOS DUST

No.*	Cause of Death	No. of Deaths		
1, 2	Tuberculosis	1		
3-9	Other infections	–		
	All infections	1	(2·3)	(4·5)†
10	Neoplasms: stomach	2		
11	lung, bronchus, pleura	7	(15·9)	(8·1)†
14, 15	others	1		
	All neoplasms	10	(22·7)	(21·7)†
18	Coronary disease	9		
17, 19-21	Other heart & vascular disease	12		
	All circulatory disease	21	(47·7)	(33·7)†
22-25	Bronchitis, etc.	4		
26-31	Other causes	1		
32	Ill-defined diseases	1		
33	Accidents: vehicle	1		
34, 35	others	5		
	Accidents	6	(13·63)	(7·6)†
Total for which cause known		44	(100·0)	(100·0)
Deaths due to war		–		
Total for which cause not yet known		2‡		
Grand total		46		

*Abridged list of causes of death as used by the R.G.O. for England and Wales.

†Proportionate mortality figures for deaths in south-east Wales in all men (25-64 years) in 1952-61.

‡Dates of death not yet ascertained with certainty.

Numbers of deaths for certain causes shown as a percentage of all deaths for which cause is known (excluding deaths due to war).

little evidence of any increase in the proportion of deaths due to all neoplasms.

To examine the mortality in this group more exactly, the numbers of deaths for all causes, for neoplastic diseases, and for diseases of the circulatory system were compared with those expected on the basis of age specific mortality rates in all men in south-east Wales. The period of interest in this context is that subsequent to 15 years after the first exposure of each worker to asbestos dust, and for the majority this is 1951 and following years, though a few workers are known to have been first exposed to asbestos before 1936 and these were therefore 'at risk' during years before 1951. The expected numbers of deaths were calculated by applying age specific mortality rates for men in south-east Wales for each relevant year to the total male population at risk, using a life table technique. For those workers at risk during years before 1951 the same technique was used, but as age specific mortality data are not available for south-east Wales for years before 1951, those for 1951 were used for these years. The expected numbers so calculated, together with those observed, are shown in Table 5. There is no evidence of any important excess in the number of deaths from all causes, but there is some evidence of an excess in the observed numbers of deaths due to all neoplasms, neoplasms of the lung and bronchus, and all circulatory causes.

TABLE 5

OBSERVED NUMBERS OF DEATHS FROM ALL CAUSES, AND FROM CERTAIN CAUSES, IN MEN ALIVE 15 YEARS AFTER FIRST EXPOSURE TO ASBESTOS DUST, AND THOSE EXPECTED ON THE BASIS OF THE MORTALITY DATA FOR S.E. WALES DURING THE SAME PERIOD

I.S.C. No.	Cause of Death	Observed	Expected
400-468	Diseases of the circulatory system	21	17·54
162-163	Neoplasm of lung, bronchus, and pleura	7	3·02
140-239	All neoplasms	10	9·10
	All deaths	46	47·87

Discussion

This study was planned primarily to ascertain whether or not mesothelioma of the pleura is a common, or a relatively common, cause of death in

Medical and Scientific Literature Concerning Asbestos Exposure and Mesothelioma ~~1944-1962~~ 1943-1964

#	Year	Author(s)	Reference
1	1943	Wedler	Deut. Arch. Klim. Med. 191:189-209
2	1944	Wedler	Wedler Abstracts from Bull. Hyg. reprinted J. Indust. Hyg. Tox. 26:177, 183
3	1947	Mallory, Castleman and Parris	New England J. Med. 236:407-415
4	1949	(Chief Inspector)	Annual Report of the Chief Insp. of Factories for the year 1947
5	1949	Wyers	Postgrad. Med. J. 25:631-638
6	1949	Doig	Postgrad. Med. J. 25:639-649
7	1952	Smith	Arch. Indust. Hyg. Occup. Med. 5:242-263
8	1953	Cartier	Arch. Indust. Health 11:204-207
9	1953	Weiss	Medizinische 3:93-94
10	1954	Leicher	Arch. Gewerbepath 13:382-391
11	1954	Leicher (Abstr.)	Abstr. of above, Bull. Hyg. 30:324
12	1955	Bonser, Faulds and Stewart	Amer. J. Clin. Path. 25:126-134
13	1955	Doll	British J. Indust. Med. 12:81-86
14	1955	Bohlig and Jacob	Fortschr. Rontgen. 83:515-525
15	1956	Francia and Monarca	Istituto di Medicina ?
16			
17	1958	Braun and Truan	Arch. Indust. Health 17:634-653
18	1960	Konig	Arch. Gewerbepath. 18:159-204
19	1960	Keal	Lancet 2:1211-1216
20	1960	Eisenstadt and Wilson	Lancet 80:511-514
21	1960	Wagner, Sleggs and Marchland	Brit. J. Indust Med. 17:260-271
22	1960	Schepers	Modern Occup. Medicine 2nd. ed.
23	1961	Sleggs	SA Medical J. 14 Jan 1961 524-577
24	1961	Frenkel and Jager	Jaarboek van Kank. 11:99-106
1	1961	Heard and Williams	Thorax 16:264-281
2	1962	McCaughey, Wade, Elmes	Brit. Med. J. 2:1397
3	1962	Eisenstadt	Amer Practitioner 13:573-578
4	1962	Thompson	SA Medical Journal 36:759
5	1962	Wagner (letter)	Nature Oct 13 1962:180-181
6			
7			
8	1962	Smither, Gilson, and Wagner	Brit. Med. J. Nov 3 1962: 1194-5
9	1962	Enticknap (letter)	Brit. Med. J. Dec. 1 1962: 1475
10	1963	Mancuso and Coulter	Arch. Envir. Health vol. 6: 210-226
11	1963	Thomson, Kaschula, and McDonald	SA Medical Journal Jan 19 1963:77-81
12	1963	Thomson (letter)	Brit. Med. J. Jan 12 1963:123
13	1963	Enticknap and Smither	Brit. J. Med. 21:20-31
14	1964	Hourihane	Thorax 19:268-278
15	1964	Owen	Brit. Med. J. 25 July 1964: 214-
16	1964	Gafafer	Occupational Diseases (USPHS) 51-52
17	1964	Elwood and Cochrane	Brit. J. Indust. Med. 21:304-

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