

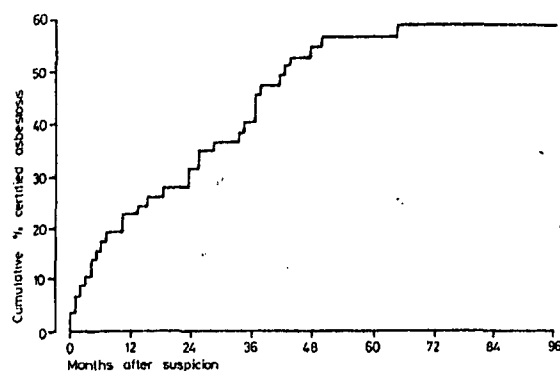


Fig. 2 Time between suspicion and certification of asbestosis.

interpreted as prevalences within the separate exposure categories because some of those subjects with radiological abnormalities were suspected to have asbestosis and were therefore transferred to less dusty conditions.

The lung function measurements have been expressed as percentages of predicted values allowing for age and height (see footnote to Table 5). The analysis was restricted to Caucasians first employed after 1950 (141 men) and the mean lung function values within exposure categories are shown in Figure 3. Table 5 shows the regression coefficients on cumulative exposure. FEV_{1.0} and FVC were significantly

Table 5 Regression coefficients of lung function indices and exposure in men first employed after 1950

Index	Regression coefficient $\pm$ standard error (% predicted* f-yr/cm ³)
FEV _{1.0}	- 0.121 $\pm$ 0.039
FVC	- 0.106 $\pm$ 0.035
TLC	- 0.006 $\pm$ 0.037
TL	- 0.069 $\pm$ 0.046

*The predicted values were calculated from the reference relationships used in the factory; these relationships were calculated on men not exposed to asbestos and allow for age (*a*, yr) and height (*h*, m):—
FEV_{1.0} = 2.72 *h* - 0.039 *a* + 0.48; FVC = 6.54 *h* - 0.032 *a* - 5.38;
TLC = 7.24 *h* - 0.028 *a* - 5.43; TL = 32.0 *h* - 0.20 *a* - 17.0.

related to exposure but there was no evidence of a relationship for TLC; the relationship for TL could have arisen by chance but cannot be considered to be unimportant.

THE INFLUENCE OF SMOKING

Information regarding smoking habits was available for all except three of the men. The associations between the most recent smoking habits and crepitations, possible and certified asbestosis, and small opacities, are shown in Table 6. The cumulative exposure was similar for each smoking category, as also was the time since first exposure to asbestos. For men first exposed after 1950 there are clear indications that non-smokers and light smokers are less likely to have any of the conditions. However

Table 4 Radiological findings and exposure

Cumulative exposure (f-yr/cm ³)	Total	Profusion of small opacities*				Bilateral pleural thickening†
		0/1	1/0	1/1	1/2 or more	
First employment before 1951						
<25	2	1	0	0	0	0
25-49	2	1	0	0	0	0
50-74	9	2	2	1	0	2
75-99	15	3	3	0	3 (1/2, 1/2, 1/2)	4
100-124	8	4	0	0	1 (3/3)	0
125-149	29	7	4	4	1 (1/2)	1
150-174	20	7	4	1	0	2
175-199	25	4	4	0	1 (3/2)	2
200-224	22	3	5	2	1 (2/2)	3
225-249	16	4	3	0	2 (1/2, 1/2)	1
≥250	34	6	10	2	5 (1/2, 2/1, 2/1, 2/2, 2/2)	4
Total	182	42	35	10	14	19
First employment after 1950						
<25	5	1	0	0	0	1
25-49	31	10	2	0	1 (1/2)	2
50-74	59	9	5	3	1 (1/2)	2
75-99	37	14	1	1	1 (3/3)	3
100-124	26	2	5	0	1 (2/1)	0
125-149	22	6	3	0	1 (2/2)	1
≥150	17	4	2	2	0	0
Total	197	46	18	6	5	9

*Average of 4 readers; if the average was halfway between two adjacent categories the reading was rounded downwards (there were 27 such cases between 0/0 and 0/1).

†At least 2 of the 4 readers recording bilateral pleural thickening.