

CHANGES IN COMPENSATION FOR OCCUPATIONAL LUNG DISEASE IN BRITAIN OVER 34 YEARS

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ABSTRACT

Silicosis was the first occupational lung disease to be made compensatable in Britain by legislation in 1919. This was followed by asbestosis in 1931, byssinosis in 1941 and coalworkers pneumoconiosis (CWP) in 1943. More recent additions were mesothelioma in 1966, occupational asthma in March 1982 and two asbestos related diseases in April 1985. (1) Primary carcinoma of the lung accompanying asbestosis and/or bilateral diffuse pleural thickening. (2) Bilateral diffuse pleural thickening. A claim is entertained if it relates to a prescribed disease. A disease may be prescribed only if it is a risk of occupation, and the occupational link can be established or presumed with reasonable certainty in individual cases.

There has been a steady decline in CWP and silicosis with an increase in asbestos related diseases. Thus there were 325 cases of CWP diagnosed in 1987 compared to 357 in 1986, 402 in 1983, 683 in 1985, 937 in 1966 and 4,449 in 1954. Asbestosis was diagnosed in 247 cases in 1987 compared to 312 in 1986, 199 in 1983, 161 in 1975, 114 in 1966 and 31 in 1954. The age at which these conditions were first diagnosed has also increased. A total of 399 cases of mesothelioma presented in 1987 compared to 441 in 1986, 413 in 1984, 282 in 1980 and 212 in 1977. Occupational asthma was found in 199 subjects in 1987 compared to 166 in 1986 and 183 in 1983. Bilateral diffuse pleural thickening was present in 115 cases in 1987 compared to 111 cases in 1986 and 61 in 1985.

The occupational lung diseases eligible for compensation (or benefit) payable by the state in Britain (prescribed respiratory diseases) include, among other conditions, coalworkers pneumoconiosis (CWP), asbestosis, silicosis, diffuse mesothelioma, byssinosis and occupational asthma. A claim for compensation can only be considered if it relates to a prescribed disease and the person concerned has been employed as an insured person under the state scheme in an occupation prescribed for the disease. A disease may be prescribed if (a) it is a risk of occupation and not a risk common to all and (b) the occupational link in individual cases can be established or presumed with reasonable certainty. A committee of experts, the Industrial Injuries Advisory Council, advises the Secretary of State whether a disease should be prescribed. The prescribed occupations for pneumoconiosis and related conditions are set out in full in the Social Security Act of 1975. The diagnosis of these diseases and the assessment of the resulting disablement is made by doctors with special experience of chest diseases employed by the Department who are stationed at eight centres in various parts of Britain.

In 1897 the first Workmens Compensation Act came into force, which gave workmen the right to compensation for accidents at work. This was funded by employers. It was not until 1919 that provision was made under this Act in respect of disablement or death due to silicosis in certain occupations. Following the report of Merewether and Price to Parliament

in 1930, the asbestos industry (asbestosis) scheme was introduced in 1931, which made compensation available for asbestosis for the first time. The publication in 1942 of a Medical Research Council report on chronic pulmonary disease in coalminers showed that these men were liable to a form of pneumoconiosis which could not be regarded as true silicosis. This led to the passing of the Workmens Compensation Act 1943, which covers all forms of pneumoconiosis, as defined in the Act. The definition adopted was "Fibrosis of the lungs due to silica dust, asbestos dust or other dusts, including the condition of the lungs known as dust reticulation."

The whole scheme has replaced the Industrial Injuries Act in July 1948, which provided state benefit for the first time for all forms of pneumoconiosis in relation to a list of scheduled occupations. These regulations were amended in 1954 to enable unscheduled occupations involving exposure to dust to be covered. In August 1956, primary malignant neoplasm of the pleura or peritoneum (diffuse mesothelioma) was included in the list of prescribed diseases, and in October 1983, the word "malignant" was dropped and the pericardium was added to the pleura and peritoneum. In March 1982, occupational asthma was added to the list of prescribed diseases in relation to the seven agents, i.e. (1) isocyanates, (2) platinum salts, (3) fumes or dusts arising from the use of hardening agents, including epoxy resins, (4) fumes arising from rosin used as a soldering flux, (5) proteolytic enzymes, (6) animal

or insects used for research, education or in laboratories, (7) dusts arising from barley, oats, rye, wheat or maize or to dusts arising from meal or flour made from these substances. Seven more agents were added to this list in September 1986; antibiotics, cimetidine, wood dust, ispaghula, castor bean dust, ipecacuanha, and azodicarbonamide. Two asbestos-related diseases were prescribed in April 1985. (1) Primary carcinoma of the lung where there is accompanying evidence of asbestosis and/or bilateral diffuse pleural thickening; (2) Bilateral diffuse pleural thickening. The latest occupational lung disorder to be prescribed was lung cancer in those who have been in an occupation involving (a) work underground in a tin mine; or (b) exposure to bis(chloromethyl)ether produced during the manufacture of chloromethyl methyl ether; or (c) exposure to zinc chromate, calcium chromate or strontium chromate in their pure forms.

The general pattern over the years has been that of a steady decline in the incidence of coalworkers pneumoconiosis and

silicosis with an increase in asbestos-related diseases. The diseases now tend to present in less severe forms and the average age at diagnosis has increased. Thus the average age of diagnosis in coalworker pneumoconiosis in 1987 was 69 years, compared to 57 years in 1968. These changes are shown in some detail in the accompanying tables. These show that only 325 cases of CWP were diagnosed in 1986 compared to 4,449 in 1954, while asbestosis was diagnosed in 247 cases in 1987 compared to 31 in 1954. 399 cases of mesothelioma presented in 1987 compared to 212 in 1977. Occupational asthma was found in 199 subjects in 1987 compared to 183 in 1983 and bilateral diffuse pleural thickening was present in 115 cases in 1987 compared to 61 in 1985.

These figures do not reflect the true evidence of the condition, as when carcinoma occurs in a known case of asbestosis, it is often financially advantageous to the patient to have this regarded as a complication of asbestosis.

Table I
Newly Diagnosed Cases of Pneumoconiosis (Prescribed Disease D1)
According to Year and Industry (Industrial Injuries Scheme)

INDUSTRY	1954	1960	1966	1972	1975	1978	1981	1983	1985	1986	1987
Coalworkers	4,449	3,279	937	626	683	476	493	402	364	357	325
Asbestos workers	31	29	114	125	161	128	140	199	273	312	247
Other mines and quarries	113	86	57	42	41	54	39	10	7	23	27
Foundry workers	256	99	55	40	31	29	13	19	18	19	19
Steel dressers	106	19	18	11	8	5	3	0	6	2	2
Pottery manufacture	345	50	27	24	24	10	10	14	14	10	18
Refractories	26	16	14	8	9	5	5	5	3	6	3
Other industries	156	76	42	43	24	37	31	21	54	44	34
TOTAL	5,482	3,654	1,264	919	981	744	734	670	739	773	675

Table II
Coalworkers Pneumoconiosis—Newly Diagnosed Cases
Analysed by Age and Year of Diagnosis

	Under 35 yrs	35-44 yrs	45-49 yrs	50-54 yrs	55-59 yrs	60-64 yrs	65 yrs & over	TOTAL
1955	199	677	746	1016	924	804	591	4997
1961	43	345	378	505	604	599	289	2768
1968 (average age 57)	7	76	92	127	161	184	127 (a)	774
1975 (average age 61)	2	22	28	73	131	139	288 (b)	683
1979 (average age 62)	-	12	15	67	144	86	214 (c)	538
1983 (average age 64)	-	9	18	31	88	65	191 (d)	402
1987 (average age 69)	-	3	7	18	17	46	234 (e)	325

(a) includes 20 aged over 75

(b) includes 63 aged over 75

(c) includes 62 aged over 75

(d) includes 70 aged over 75

(e) includes 98 aged over 75

Table III
Asbestosis—Newly Diagnosed Cases Analysed
by Age and Year of Diagnosis

	Under 35 yrs	35-44 yrs	45-49 yrs	50-54 yrs	55-59 yrs	60-64 yrs	65 yrs & over	TOTAL
1961	-	5	11	8	5	9	5	43
1968 (average age 55)	1	17	17	28	22	31	14 (a)	130
1975 (average age 58)	-	11	19	25	35	39	32 (b)	161
1979 (average age 59)	-	5	9	22	45	21	21 (c)	123
1983 (average age 61)	-	4	15	30	45	35	70 (d)	199
1987 (average age 63)	-	4	11	17	39	59	117 (e)	247

(a) include 1 aged over 75

(b) includes 4 aged over 75

(c) includes 1 aged over 75

(d) includes 16 aged over 75

(e) includes 26 aged over 75

Table IV
Mesothelioma Cases Diagnosed According to Year

1966 - 76	1977	1980	1983	1984	1985	1986	1987
1,109	212	282	312	413	405	441	399

Table V
Occupational Asthma—PD D7
Newly Diagnosed Cases Analysed by Agent and Year of Diagnosis

	1983	1984	1985	1986	1987	TOTAL
ISOCYANATES	74	51	46	48	47	266
PLATINUM SALTS	9	4	9	12	10	44
HARDENING AGENTS	12	14	19	28	18	91
SOLDERING FLUX	24	27	25	20	22	118
PROTEOLYTIC ENZYMES	3	1	6	0	5	15
ANIMALS/INSECTS	7	8	7	12	7	41
FLOUR GRAIN	54	32	54	46	41	227
ANTIBIOTICS	0	0	0	0	30	30
CIMETIDINE	0	0	0	0	0	0
WOOD DUST	0	0	0	0	15	15
ISPAGHULA	0	0	0	0	0	0
CASTOR BEAN DUST	0	0	0	0	0	0
IPECACUANHA	0	0	0	0	0	0
AZODICARBONAMIDE	0	0	0	0	4	4
TOTAL	183	137	166	166	199	851

Table VI

Lung Cancer Accompanied by Asbestosis or Bilateral Diffuse
Pleural Thickening (Prescribed Disease D8)
Cases Diagnosed According to Year

1985	1986	1987	TOTAL
8	34	55	97

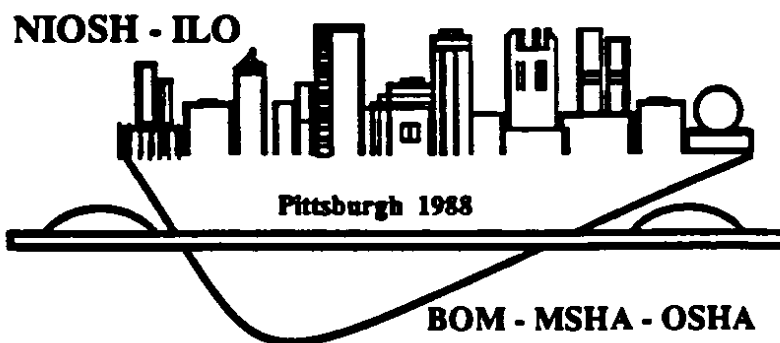
Table VII

Bilateral Diffuse Pleural Thickening (Prescribed Disease D9)
Cases Diagnosed According to Year

1985	1986	1987	TOTAL
61	111	115	287

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