



Department for Work and Pensions

Department for Work and Pensions Social
Security Administration Act 1992

Asbestos-related diseases

Report by the Industrial Injuries Advisory Council
in accordance with Section 171 of the Social
Security Administration Act 1992 reviewing the
prescription of the asbestos-related diseases.

(17)

*Presented to Parliament by the Secretary of State for Work and Pensions
by Command of Her Majesty
July 2005*

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INDUSTRIAL INJURIES ADVISORY COUNCIL

The Rt Hon David Blunkett MP
Secretary of State for Work and Pensions

Dear Secretary of State,

REVIEW OF THE SCHEDULE OF PRESCRIBED DISEASES: ASBESTOS-RELATED DISEASES

1. In August 2003, we announced that the Industrial Injuries Advisory Council would be conducting a review of the asbestos-related diseases - as part of our remit to review the scheduled list of prescribed diseases for which benefits are paid. We last reviewed the asbestos-related prescribed diseases, namely asbestosis, mesothelioma, lung cancer and pleural thickening in November 1996 (Cm. 3467). Since that time new evidence has accumulated which has informed this review.

2. We recommend that diagnosis of asbestosis be based on clinical evidence of interstitial pulmonary fibrosis and a history of substantial asbestos exposure. High counts of asbestos bodies or fibres in the lungs may be used to support the diagnosis of asbestosis. However, a lack of asbestos fibres or bodies should not be used to exclude a diagnosis of asbestosis as asbestos bodies may be absent and fibres not increased above background level in clear cut cases (i.e. these counting techniques have a significant false negative rate).

3. There is a difference between the numbers of people in receipt of IIDB for mesothelioma and the number of individuals dying from mesothelioma in the UK. We found no evidence that the terms of prescription account for the shortfall and these do not need to change. There may be several reasons for this difference: these include ineligible claims by the self-employed or from cases caused by non-occupational exposures, but one important reason may be a lack of awareness of the Scheme. We recommend that the provisions of the IIDB Scheme be highlighted to mesothelioma sufferers.

4. The prescription of lung cancer due to asbestos has had a long history. Whilst it is clear that there is an excess of risk of lung cancer in the presence of asbestosis, evidence has accumulated which demonstrates that lung cancer can occur independently from asbestosis, where substantial occupational exposure to asbestos has occurred. We recommend adding lung cancer in the absence of asbestosis, for occupations where there is evidence of substantial occupational asbestos exposure, to the terms of prescription for PD D8. We further recommend removing pleural thickening from the terms of prescription for lung cancer, as it is unreliable as an indicator of substantial asbestos exposure - the purpose it was meant to serve. Due to the poor prognosis for those with asbestos-related lung cancer, we recommend that all claimants of PD D8 be assessed at 100% disablement.

5. The increasing use of non-standard plain chest radiographs has complicated the diagnosis of diffuse pleural thickening (PD D9) which relies on measurements of the extent of pleural thickening. We recommend that diagnosis of diffuse pleural thickening be based upon involvement of the costophrenic angle on a plain chest radiograph.

6. We have considered pleural plaques due to occupational asbestos exposure but find that there is a lack of evidence to justify the prescription of this disorder.

7. Computed tomography scans may be used for the diagnosis of asbestosis and pleural thickening where available. However, we are unable to recommend requiring the use of such scans for the purposes of determining benefit.

8. Finally we have considered the issue of gross payments for terminally ill claimants, such as those with mesothelioma, compared to those with less severe prescribed diseases. We recommend that the current inequity in the payment structure of the IIDB Scheme be referred by the Department for Work and Pensions to the Council for a full review.

Yours sincerely,

Professor A J Newman Taylor

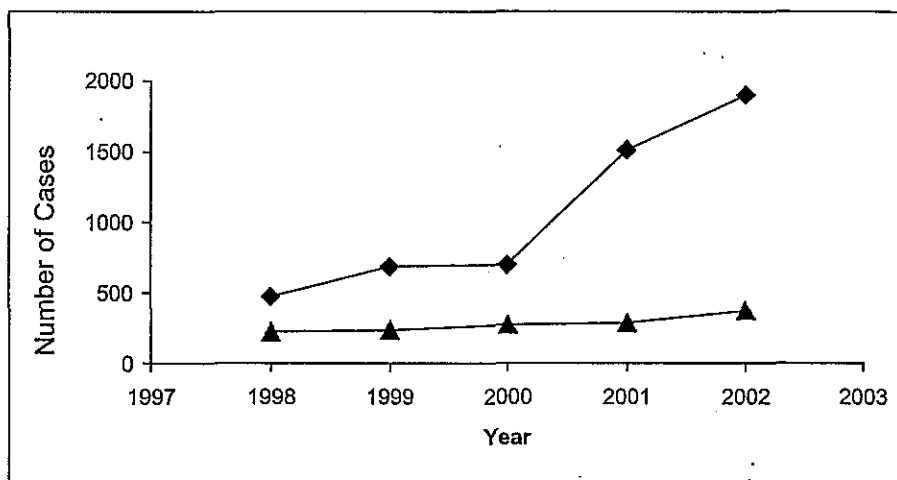
Chairman

Date: 20 January 2005

PD D9 Pleural thickening

Claims activity

69. The number of new claims for PD D9 have increased three-fold between 1998 and 2002, with approximately 2000 claims in 2002 (see graph below, diamonds). The number of new assessments for PD D9 have also increased with 380 in 2002 compared to 230 in 1998 (triangles in graph below). For the period 1998 – 2002, 88% of assessments were at 14-100% disablement, 11% were at 1-13% disablement and 1% were at less than 1% disablement. (In 1996, the Council recommended changes to widen the prescription of PD D9 to include both bilateral and unilateral pleural thickening).



- ▲ PD D9 assessments;
- ◆ PD D9 claims

Evidence received Diagnostic criteria

70. The current terms of prescription specify measurements of pleural thickening based on standard radiographs for satisfaction of the diagnostic criteria. However, non-standard sized radiographs are often now used with limited means of calibration, making use of a specific measurement for diagnosis problematic. The experts suggested that involvement of the costophrenic angles could be used as a diagnostic indicator for diffuse pleural thickening due to asbestos. Indeed, in the experts' opinion involvement of the costophrenic angle was one of the most important clinical factors in diagnosis of diffuse pleural thickening caused by asbestos and the chest radiograph the best indicator of the presence of diffuse pleural thickening.

Occupational coverage

71. The occupational coverage for pleural thickening should remain unchanged.

Recommendations

72. The Council recommends that:

- a) The prescription for PD D9 should be amended to remove the requirement for measurements of pleural thickening and introduce the requirement for involvement of costophrenic angle on plain chest radiographs.
- b) The occupational coverage for PD D9 should remain unchanged.

Other issues relating to the asbestos-related diseases

- Symptomatic pleural plaques** 73. The Council recognises that symptomatic pleural plaques can occur. However, there is a lack of evidence that they cause impairment of lung function sufficient to cause disability. In civil litigation pleural plaques may attract compensation, although this is generally for the psychological distress and for associated risk of other asbestos-related diseases. IAC will continue to monitor research relating to symptomatic pleural plaques and keep this issue under review.
- Use of computerised tomography scans** 74. Computerised tomography (CT) scans provide useful information and can be effectively used in early diagnosis of asbestosis and pleural thickening. In recent years, CT scans have become more widely used in diagnosis of pleural thickening and asbestosis. However, it remains standard clinical practice for patients to be assessed initially by plain chest radiograph. At present only a proportion of patients are subsequently assessed by CT. All claimants will have had a chest radiograph but not all will have had a CT scan. When available, CT scans can be used for diagnosis in claimants. The Council will reconsider these recommendations if in the future CT scans become universal in these investigations.
- Payments for the terminally ill** 75. The Council is keen that the issue of payments for terminally ill claimants, including those with asbestos-related diseases, such as mesothelioma and those with non-asbestos-related diseases, such as bladder cancer³, be addressed. Such claimants are assessed at 100% disablement, but due to the poor life expectancy for this group, receive only a fraction of the total amount payable to those with less severe prescribed diseases. The Council recommends that this inequity in the structure of payments for the terminally ill compared to other prescribed diseases should be considered by the Department for Work and Pensions for review by IAC.
- Prevention** 76. Asbestos diseases can be prevented by ensuring that workers who come into contact with asbestos containing materials are not exposed to the asbestos fibres which may be released when these materials are handled. The importation, supply and use of asbestos has now been banned but asbestos was extensively used as a building material from the 1950s through to the late 1970s. Those currently at risk from exposure to asbestos fibres include those who remove asbestos containing materials and building and maintenance workers who may unknowingly be exposed during the course of their work. To deal with the risks of exposure, there is a requirement in the Control of Asbestos at Work Regulations 2003 to carry out a risk assessment and to prevent exposure to asbestos fibres so far as is reasonably practicable. Since May 2004, there has been a new duty on those who have maintenance and repair responsibilities for non-domestic premises to assess those premises for the presence of asbestos and the condition of that asbestos, and to take a series of actions depending on the assessment.
- Recommendations** 77. The Council recommends that the diagnosis of asbestosis is based on the presence of interstitial lung fibrosis together with a history of substantial exposure to asbestos. A high asbestos fibre or body count in the lungs can be supportive of a diagnosis of asbestosis but, because of high false negative rate, the absence of such fibres or bodies should not be used to exclude a diagnosis. The occupational history should be the primary consideration in all such cases. Occupational coverage for PD D1 should remain unchanged.
78. The occupational categories for PD D3 cover any occupational exposure to asbestos and the Council is satisfied that this provides adequate exposure coverage. The Council urge that all mesothelioma sufferers are made aware of the provisions of the IIDB Scheme for PD D3.

3 It should be noted that not all cases of bladder cancer are terminal, and thus are not assessed at 100% disablement.

79. Asbestosis and pleural thickening were originally included in the terms of prescription for asbestos-related lung cancer (PD D8) as markers of exposure to asbestos. Epidemiological evidence has confirmed the greatly increased risk of lung cancer in those with asbestosis. The Council remains content that where asbestosis is present when lung cancer is diagnosed, the lung cancer can be attributed with reasonable confidence to previous asbestos exposure.

80. However, more recent evidence indicates that pleural thickening is an unreliable index of substantial exposure to asbestos and should not therefore be used as a marker for an increased risk of lung cancer. The Council recommends the removal of reference to pleural thickening from the terms of prescription for PD D8.

81. Evidence suggests asbestosis is not necessarily present in patients with lung cancer who have had substantial exposure to asbestos. The Council recommends adding occupational categories to the scheduled list where there is a doubling of risk for lung cancer due to substantial asbestos exposure in the absence of asbestosis. The Council has carefully reviewed the occupational coverage for lung cancer and suggest that it be amended to cover: asbestos textile workers; asbestos sprayers; asbestos insulation workers, including those applying and removing asbestos-containing materials in shipbuilding. For exposures occurring before 1975, workers should have been in the occupations listed for at least 5 years. For exposures occurring after 1975, workers should have been in the occupations listed for at least 10 years (see Appendix 3: Recommended Terms of Prescription).

82. IIAC recommends that eligible cases of asbestos-related lung cancer should be assessed at 100% disablement due to the poor prognosis for this group of claimants.

83. The terms of prescription for PD D9 be amended to remove reference to specific measurements of the degree of pleural thickening. Instead the terms of prescription should specify that diagnosis of diffuse pleural thickening by chest radiograph should include the involvement of the costophrenic angle. The occupational categories for PD D9 should remain unchanged.

84. There is a lack of evidence that pleural plaques cause impairment of lung function sufficient to cause disability. IIAC does not recommend adding pleural plaques to the list of prescribed diseases, but will continue to monitor new research.

85. Where available, CT scans can be used in diagnosis of asbestos-related diseases for IIDB, but are not required under the scheme.

86. The Council recommends that the structure of payments for the terminally ill, such as those with mesothelioma should be considered by the Department for Work and Pensions and should be the subject of a future review by IIAC.

APPENDIX 1: Current terms of prescription

Disease number	Name of disease or injury	Type of job
D1	Pneumoconiosis	<ol style="list-style-type: none"> 1) (a) The mining, quarrying or working of silica rock or the working of dried quartzose sand or any dry deposit or dry residue of silica or any dry admixture containing such materials (including any occupation in which any of the aforesaid operations are carried out incidentally to the mining or quarrying of other materials or to the manufacture of articles containing crushed or ground silica rock); (b) the handling of any of the material specified in the foregoing subparagraph in or incidental to any of the operations mentioned therein, or substantial exposure to the dust arising from such operations. 2) The breaking, crushing or grinding of flint or the working or handling of broken, crushed or ground flint or materials containing such flint, or substantial exposure to the dust arising from any such operations. 3) Sand blasting by means of compressed air with the use of quartzose sand or crushed silica rock or flint, or substantial exposure to the dust arising from sand and blasting. 4) Work in a foundry or the performance of, or substantial exposure to the dust arising from, any of the following operations: <ol style="list-style-type: none"> a) the freeing of steel castings from adherent siliceous substance; b) the freeing of metal castings from adherent siliceous substance: <ol style="list-style-type: none"> i) by blasting with an abrasive propelled by compressed air, by steam or by a wheel, or ii) by the use of power-driven tools. 5) The manufacture of china or earthenware (including sanitary earthenware, electrical earthenware and earthenware tiles), and any occupation involving substantial exposure to the dust arising therefrom. 6) The grinding of mineral graphite, or substantial exposure to the dust arising from such grinding. 7) The dressing of granite or any igneous rock by masons or the crushing of such materials, or substantial exposure to the dust arising from such operations. 8) The use, or preparation for use, of a grindstone or substantial exposure to the dust arising therefrom. 9) a) The working or handling of asbestos or any admixture of asbestos;

		<p>b) the manufacture or repair of asbestos textiles or other articles containing or composed of asbestos;</p> <p>c) the cleaning of any machinery or plant used in any foregoing operations and of any chambers, fixtures and appliances for the collection of asbestos dust;</p> <p>d) substantial exposure to the dust arising from any of the foregoing operations.</p> <p>10) a) Work underground in any mine in which one of the objects of the mining operations is the getting of any mineral;</p> <p>b) The working or handling above ground at any coal or tin mine of any minerals extracted therefrom, or any operation incidental thereto;</p> <p>c) The trimming of coal in any ship, barge, or lighter, or in any dock or harbour or at any wharf or quay;</p> <p>d) The sawing, splitting or dressing of slate, or any operation incidental thereto.</p> <p>11) The manufacture of carbon electrodes by an industrial undertaking for use in the electrolytic extraction of aluminium from aluminium oxide, and any occupation involving substantial exposure to the dust arising therefrom.</p> <p>12) Boiler scaling or substantial exposure to the dust arising therefrom.</p> <p>13) Exposure to dust if the person employed in it has never at any time worked in any of the other occupations listed.</p>
D3	Diffuse mesothelioma (primary neoplasm of the mesothelium of the pleura or of the pericardium or of the peritoneum).	Exposure to asbestos, asbestos dust or any admixture of asbestos at a level above that commonly found in the environment at large.
D8	<p>Primary carcinoma of the lung where there is accompanying evidence of one or both of the following:</p> <p>a) Asbestosis</p> <p>b) Unilateral or bilateral diffuse pleural thickening extending to a thickness of 5mm or more at any point within the area affected as measured by a plain chest radiograph (not being a computerised tomography scan or other form of imaging) which:</p> <p>i) in the case of unilateral diffuse pleural thickening, covers 50% or more of the area of the chest wall of the lung affected; or</p>	<p>a) The working or handling of asbestos or any admixture of asbestos; or</p> <p>b) The manufacture or repair of asbestos textiles or other articles containing or composed of asbestos; or</p> <p>c) The cleaning of any machinery or plant used in any of the foregoing operations and of any chambers, fixtures and appliances for the collection of asbestos dust; or</p> <p>d) Substantial exposure to the dust arising from any of the foregoing operations.</p>

	<p>ii) in the case of bilateral diffuse pleural thickening, covers 25% or more of the combined area of the chest wall of both lungs.</p>	
D9	<p>Unilateral or bilateral diffuse pleural thickening extending to a thickness or 5mm or more at any point within the area affected as measured by a plain chest radiograph (not being a computerised tomography scan or other form of imaging) which:</p> <p>i) in the case of unilateral diffuse pleural thickening, covers 50% or more of the area of the chest wall of the lung affected; or</p> <p>ii) in the case of bilateral diffuse pleural thickening, covers 25% or more of the combined area of the chest wall of both lungs.</p>	As D8 above.

APPENDIX 2: Consultations received

Professor David Hansell

Royal Brompton Hospital, London

Professor J Corbett McDonald

Royal Brompton Hospital, London

Dr Clive McGavin

Derriford Hospital, Plymouth

Dr Robin Rudd

St Bartholomew's Hospital, London.

Dr Nancy Tait

Occupational and Environmental Diseases
Association, Enfield, Middlesex

Professor Douglas Hendersen

Flinders University, Australia

APPENDIX 3: Recommended terms of prescription

Disease number	Name of disease or injury	Type of job
D1	Pneumoconiosis	<p>1) (a) The mining, quarrying or working of silica rock or the working of dried quartzose sand or any dry deposit or dry residue of silica or any dry admixture containing such materials (including any occupation in which any of the aforesaid operations are carried out incidentally to the mining or quarrying of other materials or to the manufacture of articles containing crushed or ground silica rock);</p> <p>(b) the handling of any of the material specified in the foregoing subparagraph in or incidental to any of the operations mentioned therein, or substantial exposure to the dust arising from such operations.</p> <p>2) The breaking, crushing or grinding of flint or the working or handling of broken, crushed or ground flint or materials containing such flint, or substantial exposure to the dust arising from any such operations.</p> <p>3) Sand blasting by means of compressed air with the use of quartzose sand or crushed silica rock or flint, or substantial exposure to the dust arising from sand and blasting.</p> <p>4) Work in a foundry or the performance of, or substantial exposure to the dust arising from, any of the following operations:</p> <p>a) the freeing of steel castings from adherent siliceous substance;</p> <p>b) the freeing of metal castings from adherent siliceous substance:</p> <p style="padding-left: 20px;">i) by blasting with an abrasive propelled by compressed air, by steam or by a wheel, or</p> <p style="padding-left: 20px;">ii) by the use of power-driven tools.</p> <p>5) The manufacture of china or earthenware (including sanitary earthenware, electrical earthenware and earthenware tiles), and any occupation involving substantial exposure to the dust arising therefrom.</p> <p>6) The grinding of mineral graphite, or substantial exposure to the dust arising from such grinding.</p>

		<p>7) The dressing of granite or any igneous rock by masons or the crushing of such materials, or substantial exposure to the dust arising from such operations.</p> <p>8) The use, or preparation for use, of a grindstone or substantial exposure to the dust arising therefrom.</p> <p>9) a) The working or handling of asbestos or any admixture of asbestos; b) the manufacture or repair of asbestos textiles or other articles containing or composed of asbestos; c) the cleaning of any machinery or plant used in any foregoing operations and of any chambers, fixtures and appliances for the collection of asbestos dust; d) substantial exposure to the dust arising from any of the foregoing operations.</p> <p>10) a) Work underground in any mine in which one of the objects of the mining operations is the getting of any mineral; b) The working or handling above ground at any coal or tin mine of any minerals extracted therefrom, or any operation incidental thereto; c) The trimming of coal in any ship, barge, or lighter, or in any dock or harbour or at any wharf or quay; d) The sawing, splitting or dressing of slate, or any operation incidental thereto.</p> <p>11) The manufacture of carbon electrodes by an industrial undertaking for use in the electrolytic extraction of aluminium from aluminium oxide, and any occupation involving substantial exposure to the dust arising therefrom.</p> <p>12) Boiler scaling or substantial exposure to the dust arising therefrom.</p> <p>13) Exposure to dust if the person employed in it has never at any time worked in any of the other occupations listed.</p>
D3	Diffuse mesothelioma (primary neoplasm of the mesothelium of the pleura or of the pericardium or of the peritoneum)	Exposure to asbestos, asbestos dust or any admixture of asbestos at a level above that commonly found in the environment at large.
D8a	Primary carcinoma of the lung in the presence of asbestosis	<p>i) The working or handling of asbestos or any admixture of asbestos; or</p> <p>ii) The manufacture or repair of asbestos textiles or other articles containing or composed of asbestos; or</p>

		<p>iii) the cleaning of any machinery or plant used in any foregoing operations and of any chambers, fixtures and appliances for the collection of asbestos dust;</p> <p>iv) or substantial exposure to the dust arising from any of the foregoing operations.</p>
D8b	Primary carcinoma of the lung in the absence of asbestosis	<p>Exposure to asbestos for at least 5 years before 1975 and 10 years after 1975 in the following occupations:</p> <p>i) workers in asbestos textile manufacture;</p> <p>ii) asbestos sprayers;</p> <p>iii) asbestos insulation work, including those applying and removing asbestos-containing materials in shipbuilding.</p>
D9	Unilateral or bilateral diffuse pleural thickening with obliteration of the costophrenic angle(s)	<p>a) The working or handling of asbestos or any admixture of asbestos; or</p> <p>b) The manufacture or repair of asbestos textiles or other articles containing or composed of asbestos; or</p> <p>c) The cleaning of any machinery or plant used in any of the foregoing operations and of any chambers, fixtures and appliances for the collection of asbestos dust; or</p> <p>d) Substantial exposure to the dust arising from any of the foregoing operations.</p>