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Pleural Plaques: numbers, costs, and international approaches.

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This paper examines assessments of the financial impact of the draft Damages (Asbestos-related Conditions) Bill and seeks to put the proposed legislation into an international context.

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Key Points

- The cost estimates of the impact of the Bill provided by the Department and the Ministry of Justice vary considerably. Both methodologies have significant weaknesses – this is particularly the case in relation to the latter.

- It has not been possible to develop a more robust methodology on the basis of the available evidence.

- Although the Department has twice sought information from the insurance industry and solicitors in relation to the number of cases of pleural plaques in Northern Ireland without much response, it *might* be possible for the Committee to play a part in generating an evidence base during its formal consideration of the Bill.

- Internationally, issues relating to compensation for pleural plaques are generally handled by the courts rather than in legislation. There is no clear evidence of specific legislation relating to pleural plaques outside of Scotland.

Executive Summary

The research presented in this paper addressed two main issues. Firstly, the quantification of pleural plaques cases and associated cost that might result from the Bill. Secondly, whether there are international examples of legislation that addresses pleural plaques as a compensatable condition.

In relation to the first issue, the methodologies applied by the Department of Finance and Personnel and the UK Ministry of Justice are examined. Neither is free from relatively significant difficulties. But it has not been possible to establish on the basis of available evidence a more robust methodology.

In relation to the second issue, it has not been possible to find specific examples of legislation that refer to pleural plaques in other countries with the obvious exception of Scotland. In fact, it appears that as a general rule, this issue is handled by the courts not legislatures.

The paper does not consider the moral or political implications of either proceeding or not proceeding with legislation.

Contents

1. Introduction

The Department of Finance and Personnel ("the Department") intends to bring forward the Damages (Asbestos-related Conditions) Bill to the Assembly. On the current timetable it will be introduced on 15 November 2010.

The Committee for Finance and Personnel ("the Committee") has received a number of briefings on the proposed legislation from the Department. On 15 September 2010, the Committee heard evidence in relation to the Department's consultation on the Bill.[1]

A number of issues were identified by Members of the Committee as being of concern and subsequently it was decided to commission this paper from Assembly Research. The paper explores two primary considerations:

- the number and costs of previous and potential claims; and
- examines whether pleural plaques is a condition for which compensation may be claimed in other jurisdictions.

In the course of the research, a number of broader points have come to light and these are also discussed in the concluding remarks.

What are pleural plaques?

Pleural plaques are a thickening of the pleura (lining of the lung) that are caused by asbestos exposure. They are a distinct medical condition from diffuse pleural thickening, asbestosis, mesothelioma or asbestos-related lung cancer. The medical consensus is that pleural plaques are not harmful and do not develop into other life-threatening diseases, but their presence in the lungs of an individual does indicate exposure to asbestos – see section 4 for further detail.

[1] Official Report, Committee for Finance and Personnel 15 September 2010, available online at: http://www.niassembly.gov.uk/record/committees2010/FinancePersonnel/100915_Pleural%20Pagues.pdf (accessed 30 September 2010)

2. Assessment of potential number of claims and associated costs

2.1 Cost assessments produced by the Department

The Department's Cost Estimates

The Department attempted to gather information on the potential number of pleural plaques cases and therefore the associated cost of introducing the legislation. In its Regulatory Impact Assessment, the Department noted "very little information was forthcoming, making it difficult to predict the likely impact of a change to the law."[2]

In the absence of an alternative approach, the Department quantified the possible financial impact of the Bill by reference to the cost assessment attached to similar legislation that has already been passed in Scotland.[3] The assessment was performed on the basis of dividing the projected annual cost in Scotland by 1/3 given that Northern Ireland's population is about 1/3 of Scotland's. This gave a potential annual cost in Northern Ireland of between £1,253,666 and £2,315,666.

The Department then noted that "the level of payments of compensation in Northern Ireland are higher than in Scotland" and suggested that an annual figure of £2,000,000 to £3,000,000 might be more realistic.[4]

Weaknesses of this approach

There are potential difficulties with the Department's chosen approach to estimating the cost:

- The data for Scotland are based on estimates and projections rather than concrete figures - although in Scotland is it was at least possible to quantify the number of backed-up cases which for Northern Ireland it was not. Simply put, it is quite possible that the data will be inaccurate, as with any projections. Consequently, an attempt to quantify costs in Northern Ireland by reference to those figures may also be inaccurate; and
- Size of population is not necessarily of itself a good indicator of the prevalence of pleural plaques in that population. There are a number of other factors that might have a bearing:
  - prevalence of asbestos use in Northern Ireland industry relative to Scotland;
  - the number of people employed in asbestos-using industries relative to the population as a whole; and

[2] DFP (2010) 'Consultation on the Draft Damages (Asbestos-Related Conditions) Bill (Northern Ireland) 2010' available online at: http://www.dfpni.gov.uk/consultation-on-pleural-plaques-legislation.pdf (accessed 30 September 2010) (see page 32)
[3] The Damages (Asbestos-related Conditions) (Scotland) Act 2009
[4] DFP (2010) 'Consultation on the Draft Damages (Asbestos-Related Conditions) Bill (Northern Ireland) 2010' available online at: http://www.dfpni.gov.uk/consultation-on-pleural-plaques-legislation.pdf (accessed 30 September 2010) (see page 33)

- differences in other environmental factors that could lead to increased risks – such as background levels of asbestos in the atmosphere.

Having said this, given that neither Northern Ireland nor Scotland is or was an asbestos *producing* region, the impact of background exposure differentials may well not be significant.

2.2 Cost assessments provided by the insurance industry

The Association of British Insurers' Cost Estimate

The Association of British Insurers (ABI) stated in its response to the Department's consultation that "the costs of the Bill are unquantifiable". But having said that ABI went on to state that the costs were "likely to be very high."[5]

The UK Ministry of Justice produced an estimate of costs for proceeding down a legislative route on the same issue, approximating that costs could be between £3.7 billion and £28.6 billion.[6] The sheer scale of the range in that estimate in itself points at the uncertainty inherent in trying to assess the costs of legislative change. Nevertheless, ABI estimated – also on the basis of population proportions – that Northern Ireland could "expect to bear 2.9% relative to [that] cost" i.e. between £111 million and £858 million.

Note: These figures represent an estimate of *total* cost. The Department's estimate was of an *annual* cost. Given that asbestos cases may not peak until 2020 (see section 2.3) the annual cost could reasonably run for at least 20 years. Working on the mid-point of the Department's estimate gives: £2.5 million x 20 years = £50 million.

Weaknesses of this approach

Even bearing in mind the difficulties with basing relative costs on population size mentioned above, the difference between these estimated costs to Northern Ireland is still staggering.

The Ministry of Justice document does acknowledge that:

> *There is a high level of uncertainty regarding the estimated number of future claims. Pleural plaques are asymptomatic and there may be a long latency period, so it is difficult to estimate with certainty the number of potential cases.*[7]

[5] DFP (2010) 'Analysis of responses to the consultation on the draft Damages (Asbestos-related Conditions) Bill 2010'
[6] Ministry of Justice (2008)'Pleural plaques: consultation paper CP 14/08' available online at: http://www.justice.gov.uk/docs/cp1408.pdf (accessed 30 September 2010) (see page 33)
[7] Ministry of Justice (2008)'Pleural plaques: consultation paper CP 14/08' available online at: http://www.justice.gov.uk/docs/cp1408.pdf (accessed 30 September 2010) (see page 33)

The approach taken by the Scottish Government was to look at cases 'backed up' in the legal pipeline. The Ministry of Justice Regulatory Impact Assessment utilises a large number of assumptions, which explains the enormous range in potential costs. For purposes of illustration, the same costing methodology is applied to Northern Ireland in the next section.

2.3 How many claims could there be in Northern Ireland?

This section looks first at another methodology for estimating exposure and then explores the possibility of developing an alternative evidence-based approach to assessing the impact of the legislation.

Method 1

Using the methodology applied to costing the impact of equivalent legislation by the Ministry of Justice on the UK as a whole but using Northern Ireland data yields the following results:

Table 1: estimate of asbestos exposure in Northern Ireland

	Low estimate	High estimate
Total potential occupational exposure	114,400	143,000
Total diagnosed – 25% diagnosis rate	28,600	35,750
Total diagnosed – 50% diagnosis rate	57,200	71,500

A fully worked example of this methodology is attached at Appendix 1.

Alternative methodologies

An alternative methodology to that used in the Ministry of Justice Regulatory Impact Assessment (RIA) is to base an estimate on epidemiological[8] studies that have been conducted using data from the Northern Ireland population. The overwhelming difficulty with such an approach is again a lack of up-to-date evidence.

A study published in the *Annals of the New York Academy of Sciences* found that approximately 20% of the male population of Belfast had asbestos bodies in the lungs at autopsy. The study concluded that:

> *It is impossible to say [the risk to the population], but it appears that about a quarter of the male population and a smaller proportion of the female*

[8] 'epidemiology' is the study of the spread and treatment of disease.

> *population [of Belfast] may have been exposed to sufficient asbestos to cause mesothelioma in susceptible individuals.*[9]

This study was conducted more than fifty years ago and the findings were based on a small post-mortem sample of 200 individuals that did not have malignant lung disease.

The importation of asbestos has been stopped altogether in the years following this study, although there is still asbestos in the environment contained in products such as roof tiles and boiler linings for example. But this data is simply too old to be of much relevance to the modern day population of Belfast, let alone the wider Northern Ireland population as a whole.

A more up-to-date study was published in 1999 in the *Journal of Public Health Medicine*[10]. The researchers looked at all deaths in Northern Ireland between 1985 and 1994 in which asbestos-related disease was mentioned anywhere on the death certificate – a total of 527 cases. It found that:

> *Deaths were clustered around the Belfast estuary, the site of Northern Ireland's shipbuilding industry. High proportional mortality ratios were demonstrated for occupations associated with the shipbuilding and construction industries […] If lung cancers are included, there may be an average of 81 asbestos related deaths in Northern Ireland every year.*[11]

The question for the present paper, however, is whether there are any useful data for quantifying the incidence of pleural plaques in the present Northern Ireland population. The researchers also went on to state:

> *The knowledge of the dangers to health caused by asbestos exposure and the possibility of compensation arising from industrial injuries have probably ensured that most of those who may have been occupationally exposed have been adequately examined and diagnosed ante-mortem.*[12]

This statement – taken at face value – would imply that there is *not* a huge 'time-bomb' of occupationally exposed individuals who are not already aware of the presence of pleural plaques in their bodies. But the difficulty remains that - without access to medical records or information from solicitors – it is not possible to say how large a group of people may have been affected.

Another consideration is the latency period. According to *Mesothelioma Control*

[9] Elmes, P and Wade, O (1965) 'Relationship between exposure to asbestos and pleural malignancy in Belfast' Annals of the New York Academy of Sciences 132(1): 549-57 (see page 556)

[10] O'Reilly, D et al (1999)'Asbestos related mortality in Northern Ireland: 1985-1994' Journal of Public Health Medicine vol 21, no.1 pp 95-101

[11] O'Reilly, D et al (1999)'Asbestos related mortality in Northern Ireland: 1985-1994' Journal of Public Health Medicine vol 21, no.1 pp 95-101 (see page 95)

[12] O'Reilly, D et al (1999)'Asbestos related mortality in Northern Ireland: 1985-1994' Journal of Public Health Medicine vol 21, no.1 pp 95-101 (see page 99)

> *A latency period of pleural plaques is sometimes less than ten years. This fact distinguishes it from other asbestos-related conditions that have latency periods of 20 to 50 years. Pleural plaques may appear in those who have had limited or intermittent exposure to asbestos.* [13]

It may be that the researchers looking in the late 1990s would miss a number of cases simply because insufficient time had elapsed from the time of the exposure. Indeed, this is acknowledged in other work in the mid-1990s that predicted that Mesothelioma deaths in Great Britain would continue to rise for at least 15-25 years (i.e. possibly not peaking until 2020 or so).[14]

On the other hand, in Clydebank in Scotland (also a shipbuilding centre) "rates of asbestos–related deaths peaked in 1989."[15] So it *might* be possible to assume that a similar pattern would have emerged in the Belfast region.

In any case, the primary weakness with relying on this sort of evidence for estimating the prevalence of pleural plaques is that – as pleural plaques are asymptomatic – the condition may not be recorded on death certificates. Death registration data "rely on the accuracy of the diagnosis and coding of the cause of death, which in turn depends on the degree of clinical awareness and the range and availability of diagnostic facilities."[16]

Even if – bearing in mind that important qualification – the data that this study unearthed could be relied upon, it still remains quite an epidemiological leap between the number of asbestos-related *deaths* in a given period and the number of individuals developing asymptomatic pleural plaques.

A final possible methodology was developed by the Finnish Institute of Occupational Health. It used a formula to relate the number of mesothelioma victims per country to that country's earlier asbestos consumption:

> *An annual raw asbestos consumption in the 1970s of 1kg per capita (of the total population) will have resulted in eight cases of mesothelioma per one million inhabitants in the years following 2000.*[17]

Such a formula could provide a rough indication of mesothelioma cases, but once again, *not* of the incidence of pleural plaques. In any case, in the course of this research it has not been possible to identify the tonnage of raw asbestos that was imported into Northern Ireland during the 1970s. For this reason, this methodology has not been pursued any further.

[13] http://www.mesotheliomacontrol.com/asbestos-related-diseases/benign-pleural-plaque.html
[14] See Peto, J et al (1995) 'Continuing increase in Mesothelioma mortality in Britain' Lancet 345: pages 535-539
[15] O'Reilly, D et al (1999)'Asbestos related mortality in Northern Ireland: 1985-1994' Journal of Public Health Medicine vol 21, no.1 pp 95-101 (see page 100)
[16] O'Reilly, D et al (1999)'Asbestos related mortality in Northern Ireland: 1985-1994' Journal of Public Health Medicine vol 21, no.1 pp 95-101 (see page 98)
[17] Münchener Re group (2009) 'Asbestos: anatomy of a mass tort'

In summary, whilst the approaches used by the Department and the Ministry of Justice are far from perfect, it appears there is not sufficient evidence to construct a more robust estimate.

2.4 What might the associated costs be?

As discussed above in sections 2.1 and 2.2 above there are weaknesses with both the approach to costing used by the Department and that used by the UK Ministry of Justice. But as has been shown in section 2.3, an alternative methodology has not been identified by this research.

The ABI estimate quoted a potential cost of between £111 million and £858 million in Northern Ireland. In fact, the calculations in Appendix 1 show that if the Ministry of Justice methodology is applied to Northern Ireland data the cost could actually be in **the range of £143 million to £893.75 million**, which is even higher than the figure put forward by the ABI in response to the Department's consultation.

Clearly such figures are worthy of some discussion and there are a number of points that should be borne in mind in relation to these estimates:

- the Ministry of Justice methodology relies on a large number of assumptions. As each assumption is applied, accuracy is accordingly reduced. Assumptions include:
  - it is possible to compare data from the USA on the occupational exposure to asbestos between 1940 and 1980 with occupational exposure in the UK over a similar period;
  - it is possible to determine the number of those occupationally exposed who have died from all causes (i.e. not necessarily related to the exposure) with any accuracy;
  - it is possible to assume a number of those exposed who will actually be *diagnosed* with pleural plaques; and
  - it is reasonable to assume that everyone diagnosed with pleural plaques will proceed to make a claim and that all claims made will be successful.
- the methodology used was actually developed with input from the ABI.[18]

This second bullet point should not be understated. Whilst it is not suggested that the insurance industry and its representatives would deliberately manipulate calculations to its own advantage, it should be noted that it is not outside the realm of possibility that insurers might wish the potential costs to be recognised as extremely high in order to protect their businesses: the insurance industry has a vested interest whether pleural plaques are, or are not, actionable.

According to a document produced by the Munich Re Group, the House of Lords decision:[19]

[18] Ministry of Justice (2008)'Pleural plaques: consultation paper CP 14/08' available online at: http://www.justice.gov.uk/docs/cp1408.pdf (accessed 30 September 2010) (see page 40)

> *…ended compensation for pleural plaques, thereby preventing up to 100,000 claims and saving defendants such as Norwich Union, Zurich Financial Services, Royal & Sun Alliance and Lloyd's of London* ***a billion pounds or more*** *[emphasis added]*[20]

If this claim is indeed correct, it illustrates the level of exposure the insurance industry itself recognises.

A proportion of any overall cost of the legislation would directly impact on the public finances through the liability of the Department of Enterprise, Trade and Investment in respect of Harland and Wolff. But there are likely to be other impacts. If the insurance industry has to meet large payouts for pleural plaques in Northern Ireland it is likely that there will be an upward pressure on insurance premiums. Given that the Committee is already concerned about the cost of insurance in Northern Ireland, this is probably not a negligible point.

[19] According to its website, the Munich Re Group is "one of the world's leading reinsurers" see http://www.munichre.com/en/profile/strategy/default.aspx

[20] Münchener Re group (2009) 'Asbestos: anatomy of a mass tort' (page 63)

3. International experience in compensating individuals that develop pleural plaques.

As a starting point for the following survey of some international approaches to compensating individuals with pleural plaques an important point needs to be made: insurance markets, compensation schemes, legislation and case law vary considerable in different nations. This has been described as a "historical jungle":

> *…in which the compensation of asbestos-related diseases is creating different scenarios and different stories. First-party insurance elements are compulsory health, disability and workers' compensation, and sometimes voluntary and supplementary group insurances. Tort-law elements are product, environmental and employers' liability.*[21]

In other words, it is a complex backdrop. Different models have developed for dealing with industrial accidents and illness, negligence and litigation. Having said that, it is possible to identify some themes and these are discussed in this section.

3.1 Compensation funds

In a number of states compensation funds have been established – for instance in France, Belgium, Japan and Slovenia. According to the Munich Re Group these funds are financed primarily by workers' compensation insurers (therefore, by employers) and are also awarded state subsidies. These state subsidies are to take into account:

> *…non-workplace-related environmental risks, past liabilities of companies no longer existing and of state enterprises – ultimately acknowledging the state's general responsibility as a risk manager and regulator.*[22]

In some regards, the limited extra-statutory compensation scheme in England, for individuals who had claims pending at the time of the House of Lords ruling, could be viewed as the state attempting to discharge its responsibility in this regard – particularly as in some cases there is liability resting with central government departments such as the Ministry of Defence.

3.2 Employers' liability

In the majority of countries (but notably excluding Canada, the USA, Mexico and Belgium, Germany and Austria) legal proceedings for compensation resolve around the field of tort law, the main element being employers' liability. Other tort law elements include environmental liability – for the dust exposure experienced by neighbours of asbestos-processing plants, the families of employees (for example the wives of

[21] Münchener Re group (2009) 'Asbestos: anatomy of a mass tort' (page 9)
[22] Münchener Re group (2009) 'Asbestos: anatomy of a mass tort' (page 9)

shipbuilders who were exposed to asbestos dust when laundering work clothes) and other third parties.

The interaction between employers' liability and workers' compensation is complex "with combinations within each legal system and even within a single company."[23] In some states employees must make a decision between receiving workers' compensation benefits and claiming under employers' liability – in India, Singapore and some states of Australia.

In other states workers' compensation can be applied simultaneously with employers' liability (such as Italy, Hungary and Russia) and in yet others only one or the other route to redress is possible. Under German law, for example, no workers' compensation annuity is payable if an individual's ability to pursue an occupation "is reduced by less than 20%."[24]

Employers' immunity

In some states, employers are not liable at all for asbestos-related diseases in their workforce because labour laws replace tort law in employment contracts by claims against the social insurance institutions of the country concerned – for example in Mexico and the Philippines.

In some states, employers are immune from liability, with the exception of intent. In other words, employers are only liable if they *intended* to expose their employee to harm. It should be noted, however, that in the legal sphere 'intent' can be established in different ways. For example, in Belgium the law assumes employers act with intent if they continue to expose their employees to the risk of occupational disease after being informed of the risk in writing by the workers' compensation insurer. In the USA however, there is a legal distinction between intentional *act* and intentional *injury.*

According to the Munich Re Group, the majority of countries follow (albeit with many variations) the UK model – the Republic of Ireland, India, Hong Kong, Malaysia, Australia, Kenya and Ghana for instance. Under this model liability applies only in the case of fault – i.e. when the employer is negligent to some degree.

3.3 Countries in which compensation may or may not be claimed for pleural plaques

The previous two sections highlight further the complicated nature of comparing provisions across national boundaries. The issue that is of prime concern in relation to the proposed Bill is whether there are examples of other states that specifically exclude or include compensation for pleural plaques, irrespective of the way in which those claims might be settled.

[23] Münchener Re group (2009) 'Asbestos: anatomy of a mass tort' (page 40)
[24] Münchener Re group (2009) 'Asbestos: anatomy of a mass tort' (page 40)

The Münchener Re Group report from which much of the information for this paper has been extracted includes some country reports which do illustrate some differences in respect of the treatment of pleural plaques. This section highlights some of those examples.

Republic of Ireland

In general the Irish model of handling industrial disease is very similar to the UK model. One significant judgement does however have relevance. In 2003 there was a case where a worker developed a fatal lung disease and a number of fellow workers developed psychological problems as a result of fear of suffering a similar fate. On appeal, the Supreme Court found that:

> *…the employer's common-law duty did not extend to the plaintiff's psychological suffering in this case because the fear was irrational and counter to all the medical evidence.*[25]

Essentially the court found that it was not fair to hold an employer to account for an employee's irrational fear of harm. This of some relevance to the Committee's consideration of the Bill because one of the arguments put forward for making pleural plaques compensatable is that sufferers can experience anxiety when the condition is diagnosed; there is a fear that – even though the medical evidence states they are harmless – the plaques *will* or at least *could* develop into something more serious.

The report concludes that is unclear what the implications of case law might be were a case like Johnson[26] to come before the Irish courts. It questions whether the courts might "extend the bounds of compensatable harm, or would revert to orthodox principles and reject the claim."[27]

Italy

In Italy, besides monetary loss (therefore lost income and medical expenses) due to a personal injury, there are three kinds of non-economic loss recoverable:

Danno bilogico	Implicit in the injury of personal integrity
Danno morale	Implicit in the pain and suffering related to a harmful event; it refers to the psychological suffering of the injured party in their internal sphere
Danno esistenziale	Relating to the change of the victim's habits as a consequence of the harmful event and therefore refers to the external sphere

[25] Münchener Re group (2009) 'Asbestos: anatomy of a mass tort' (page 69)
[26] The Johnson case resulted in the 2007 Law Lords Judgement in England that compensation should not be paid for pleural plaques.
[27] Münchener Re group (2009) 'Asbestos: anatomy of a mass tort' (page 70)

A decision of the Corte di Cassazione recently found that in the absence of danno biologico (i.e. physical damage) compensation is – in principle – admissible for compensation for the other two kinds of damage.

Claimants have to provide evidence of the seriousness of the prospective illness, or their pain and suffering and/or the loss implicit in the change of their everyday habits. There has to be a causal connection between their emotional distress and the prospectively harmful event.[28]

Czech Republic

The Czech Republic's Labour Code provides a prescriptive list of conditions for which compensation may be claimed. *Only* those diseases specified are subject to compensation. In relation to the asbestos-related disease Section III of the list mentions:

- asbestosis;
- disorder of the pleura with defect of pulmonary function;
- mesothelioma; and,
- cancer of the lungs in connection with asbestosis or disorder of the pleura.[29]

Given that pleural plaques are held not to affect the function of the lungs, they appear to be excluded.

Japan

In Japan there is a 'healthcheck note system.' Workers involved in handling asbestos get checks when hired and then annually plus a bi-annual 'asbestos examination.'

It is of some note that workers who have developed pleural plaques can apply to their prefectural labour department to receive a healthcheck note. This system provides such individuals with long-term health care and checks after finishing working with asbestos.[30] It does not appear to be the case however that compensation may be claimed for pleural plaques themselves but only when in combination with other conditions such as lung cancer.

Legislation

Generally speaking, the issue of whether asbestos-related conditions in the wide sense and pleural plaques specifically are compensated is handled in these cases by the courts rather than in legislation – the exceptions being the Czech Republic and Scotland. There is a reference in the submission made by the ABI to the Committee which is drawn from the Münchener Re Group report:

[28] Münchener Re group (2009) 'Asbestos: anatomy of a mass tort' (page 74)
[29] Münchener Re group (2009) 'Asbestos: anatomy of a mass tort' (page 88)
[30] Münchener Re group (2009) 'Asbestos: anatomy of a mass tort' (page 91)

> *…in most [US] states up until recently pleural plaques and scarring qualified as "injuries" for legal purposes, meaning that a person with signs of asbestos exposure but no functional impairment could file a legal claim for compensation.*[31]

This statement is not, however, backed up by reference to either case law or legislation which makes it difficult to verify. A search of a number of databases of legal references has not produced any results – in relation to the USA or, indeed, anywhere else.

3.4 Considerations arising from this evidence

There are a number of issues that arise from this evidence:

- compensation for pleural plaques is far from consistent in a number of countries;
- it is, generally speaking, a matter that is decided by courts rather than legislatures. Clearly the Scottish Parliament is an exception to this rule; and
- it has not been possible to identify other examples of legislation that refer to pleural plaques.

[31] Münchener Re group (2009) 'Asbestos: anatomy of a mass tort' (page 27)

4. Concluding remarks

In the course of the research presented in this paper, a number of issues have come to light, which, whilst not strictly relevant to the terms of the research request, nonetheless appear relevant to the Committee's consideration of the draft Bill. For this reason, these issues are considered in this section of the paper.

Medical evidence

During previous evidence sessions with the Department, the Committee has sought assurance that the medical evidence on pleural plaques is clear.[32] It would be a brave researcher who would state categorically that there is no contrary evidence.

Having said that, there does seem to be a considerable weight of evidence that supports the position that pleural plaques are indeed symptomless. In particular, the Industrial Injuries Advisory Council (IIAC) published a position paper on pleural plaques in response to a request from the Secretary of State for Work and Pensions which considered the likelihood of disability arising from pleural plaques, the likelihood of other more severe complications of asbestos exposure arising amongst those currently having plaques, and whether compensation through the Industrial Injuries Scheme would be appropriate for people diagnosed with this condition.[33]

It should be remembered that its findings are addressed specifically at the social security system rather than the law itself. But, it is nevertheless, a comprehensive review of the literature. The IIAC also conducted a number of consultations with leading experts in the field. It found that:

> *The nature and anatomical location of pleural plaques means that they do not alter the structure of the lungs or restrict their expansion. Therefore, they would not be expected to cause an important degree of impaired lung function or disability; and such studies as we have found and such experts as we have consulted agree that losses of lung function are likely to be either small or non-existent.*[34]

The position paper further stated that:

> *Plaques tend to grow slowly over time, but they do not become cancerous. Neither are they a cause of cancer at other sites, such as lung cancer or mesothelioma. However, the balance of evidence suggests that they are a*

[32] http://www.niassembly.gov.uk/record/committees2010/FinancePersonnel/100915_Pleural%20Paques.pdf (see page 6)

[33] IIAC (2008) 'Pleural plaques: position paper 23' available online at: http://www.iiac.org.uk/pdf/pos_papers/pp23.pdf (accessed 5 October 2010)

[34] IIAC (2008) 'Pleural plaques: position paper 23' available online at: http://www.iiac.org.uk/pdf/pos_papers/pp23.pdf (accessed 5 October 2010) (see page 5)

> *marker of future risk of lung cancer and mesothelioma, because they are a marker of exposure to asbestos.*[35]

On that basis it is entirely reasonable to assume that the established medical position is the correct one.

Anxiety and psychological distress

If the position that pleural plaques do not of themselves cause harm to individuals in terms of their lung function is accepted, there remains a question about the psychological impact of a diagnosis. At a fundamental level, it is evident from responses to the Department's consultations and Members' lines of questioning in evidence sessions in Committee that anxiety following diagnosis of pleural plaques is an issue; if one is diagnosed with pleural plaques, statements such as those quoted above from the IIAC position paper are unlikely to provide total and complete peace of mind.

Anxiety can be defined as:

- *(psychiatry) a relatively permanent state of worry and nervousness occurring in a variety of mental disorders, usually accompanied by compulsive behaviour or attacks of panic*
- *a vague unpleasant emotion that is experienced in anticipation of some (usually ill-defined) misfortune*[36]

This definition is at two levels, which is quite helpful in terms of clarifying what is understood by the term. The former definition is rooted in psychiatry which may make it a reasonable basis for compensation. The latter definition is clearly a less well-grounded and would seem a far less reasonable basis for compensation.

Looking at the former definition further, the Oxford English Dictionary definition is quite helpful:

> ***4.*** *Psychiatry. A morbid state of mind characterized by unjustified or excessive anxiety, which may be generalized or attached to particular situations. Freq. attrib. and Comb., as* ***anxiety-producing****,* ***-ridden*** *adjs.;* ***anxiety complex*** *(cf. COMPLEX n. 3);* ***anxiety hysteria****, a form of anxiety neurosis (see quot. 1923);* ***anxiety neurosis*** *[tr. G. angstneurose (Freud*

[35] IIAC (2008) 'Pleural plaques: position paper 23' available online at: http://www.iiac.org.uk/pdf/pos_papers/pp23.pdf (accessed 5 October 2010) (see page 6)

[36] source http://wordnetweb.princeton.edu/perl/webwn?s=anxiety Princeton university's lexical database for English. (accessed 5 October 2010)

> *1895, in Neurolog. Zentralbl. XIV. 55)],* ***anxiety state****, names technically applied to such a condition of anxiety.*[37]

The words 'unjustified' and 'excessive' are interesting when set into the context of the view of the Supreme Court of Ireland that it is was not fair to hold an employer to account for an employee's irrational fear of harm.

Cost of insurance

The point was made above in section 2.4, but is perhaps worthy of restatement, that the legislation may well drive up the cost of insurance in Northern Ireland. This point was made by the ABI in a letter to the Committee clerk:

> *A move towards legislation will also be extremely unhelpful in keeping a stable operating environment for insurance providers. We fear that it is likely to impact on consumers in terms of higher premiums.*[38]

This statement can be read as a pretty clear indication of how insurance providers are likely to react to the Bill. The consequences of higher premiums are quite straightforward: as a result of being compelled to meet negligence claims under employer liability insurance, insurers are likely to charge consumers more for future policies.

An additional consideration is that the legislation passed in Scotland has been subject to a judicial review and an appeal which is currently ongoing. This legal process is not cost free to the government, or to the insurers bringing the challenge. If a similar legal challenge were brought in Northern Ireland – which seems quite possible – then there would also be a cost to society. Whether this took the form of reduced public expenditure (because government had to meet costs) or increased premiums (because insurers had to meet costs) would depend on the court's decision.

[37] Source http://dictionary.oed.com/cgi/entry/50009991?single=1&query_type=word&queryword=anxiety&first=1&max_to_show=10 (accessed 5 October 2010)

[38] ABI letter to Committee clerk 23 October 2009.

Appendix 1 Calculation of potential Northern Ireland cost of legislation using Ministry of Justice methodology

Step one

Between 1940 and1980 27.5 million workers (14.6% of the workforce) in the USA were occupationally exposed to asbestos. 14.6% of the UK population ≈ 7.7million.

Note this assumption follows the Ministry of Justice approach. It should be noted that 14.6% of the *workforce* is not the same as 14.6% of the *population.*

Step two

Assume this is reduced by deaths (from all causes) to between four and five million.

In 2005 Northern Ireland's population was 1.724 million and the UK was 60,209.5 million.

So Northern Ireland's proportion of the population is (1.724 ÷ 60,209.5) x 100 = 2.86%

Low estimate:

4 million x 2.86% = 114,400.

High estimate:

5 million x 2.86% = 143,000.

So the estimated occupational exposure in Northern Ireland is between 114,400 and 143,000.

Step three

Assume the proportion of those occupationally exposed to asbestos that *develop* pleural plaques.

Low estimate:

If 25% of those exposed develop pleural plaques:

114,400 x 25% = 28,600 or 143,000 x 25% = 35,750

High estimate:

If 50% of those exposed develop pleural plaques:

114,400 x 50% = 57,200 or 143,000 x 50% = 71,500

Step four

Assume the proportion of those that develop pleural plaques that are *diagnosed* with the condition.

Low estimate:

If 20% of those with pleural plaques are diagnosed:

28,600 x 20% = 5,720 or 71,500 x 20% = 14,300

High estimate:

If 50% of those with pleural plaques are diagnosed:

28,600 x 50% = 14,300 or 71,500 x 50% = 35,750.

Step five

Assume that every case that is diagnosed leads to a claim and that each claim is won at a total cost of £25,000 (£8,000 legal costs for claimants, £6,000 legal costs for defendants plus damages award of £11,000).

Note Current guidance for the Northern Ireland judiciary[39] does not give any guidance in relation to awards for pleural plaques. The suggested range of award for pleural thickening *with* functional impairment is £18,000 to £36,000. This is to include the risk of subsequent developments adversely affecting lung function such as further thickening, asbestosis, mesothelioma and lung cancer. But the medical evidence suggests that pleural plaques do *not* impair lung function or indicate that further disease is necessarily going to develop.

In response to a request for data on previous compensation awards the NI Courts and Tribunals Service statisticians advised that the only relevant information available is for mesothelioma cases.

For mesothelioma (asbestos-related) compensation orders there are fewer than five of these from 2008 to date. Due to the small numbers, they cannot provide any further information on the amount of compensation in terms of damages or costs, to avoid the identification of individual persons.

They noted that it is important to realise that similar claims for compensation could have been made under personal injuries or negligence and not as mesothelioma and we would be unable to separate this information out from their databases. Therefore, it is only possible to use an assumed figure.

Low estimate:

[39] The Judicial Studies Board for Northern Ireland (2008) 'Guidelines for the assessment of general damages in personal injury cases in Northern Ireland' 3rd edition.

5,720 x £25,000 = £143 million

High estimate:

35,750 x £25,000 = £893.75 million