The problems of low level exposure in mesothelioma cases

1. The number of reported mesothelioma deaths continues to rise, while the typical level of exposure to asbestos in these cases seems to fall.

2. Mesothelioma is a rare tumour in those who have not been exposed to asbestos. The annual incidence of mesothelioma in the general population is about one in a million.

3. Yet an increasing number of mesothelioma cases involve relatively low levels of exposure to asbestos.

4. This seems to be a product of a number of factors:

    (a) There is no safe dose of asbestos fibres; while the aetiology of the disease is not fully understood, it seems that the tumour may be caused by one or a small number of asbestos fibres;

    (b) The growing awareness of the risks of asbestos in the 1960s and the subsequent implementation in the early 1970s of controls on the use and handling of asbestos materials; and

    (c) The potentially lengthy latency period of the disease.

5. Mesothelioma cases, set against a backdrop of relatively low levels of exposure, have generated difficult legal problems even after **Fairchild v Glenhaven Funeral Services Ltd**[1].

6. They continue to do so.

[1] [2002] UHKL 22; [2003] 1 AC 32 (HL)

7. The Courts have recently considered issues of breach of duty, with the inevitable inquiry into the history of the knowledge of the dangers caused by asbestos, and various aspects of causation.

The problem of definition

8. When is low level exposure to asbestos trivial? At what point does that exposure become significant?

9. The answers to these questions depend on the historical perspective from which they are being asked.

10. Modern mainstream scientific opinion is that there is no threshold level of exposure to asbestos fibres below which it can be considered safe. This is reflected by the Industrial Injuries Advisory Council's definition of "significant exposure" as a level of exposure above that "commonly found in the air in buildings and in the general outdoor environment…"[2].

11. This applies even where the exposure in question is to the relatively less potent chrysotile fibres. In **Jones v Metal Box Ltd**[3], HHJ Hickinbottom held that a person exposed to commercial chrysotile at levels above those found in the background environment at large has an increased risk of developing mesothelioma.

12. Knowledge of the dangers of asbestos had developed steadily from the 1930s with a sudden explosion on the publication in February 1965 of the Newhouse and Thompson paper *Mesothelioma of Pleura and Peritoneum following Exposure to Asbestos in the London Area*[4]. The study considered 83 patients from the London Hospital who had been diagnosed with mesothelioma over 50 years. The authors reported on the repeated incidence of the disease following domestic or secondary exposure; commonly where a wife had washed her husband's work overalls. They concluded: "There seems little doubt that the risk of mesothelioma may arise from both occupational and domestic exposures to asbestos…".

[2] IAAC Report on the Prescription of Mesothelioma, November 1996 Cm 3467, Appendix 2
[3] Unreported, 11 January 2007.
[4] British Journal of Industrial Medicine, February 11, 1965

13. This demonstrated that even slight exposure to asbestos created a risk of mesothelioma. The paper was publicised more widely by an article –"Scientists track down a killer dust disease"– in the *Sunday Times* on 31 October 1965. This is often taken to be general starting point of the dissemination of the knowledge of the risks of low levels of exposure.

Breach of duty

14. The decision of the Court of Appeal in **Brett v University of Reading [2007]** EWCA Civ 88 was a reminder that while **Fairchild** provided exceptional relief to a claimant who may otherwise find it impossible to prove causation, it did not remove the need to prove the other elements of the claim, such as exposure to asbestos and breach of duty.

15. In **Brett** the deceased had contracted mesothelioma. It was possible that he had been exposed to asbestos during the course of a number of jobs. But his estate sued only the University of Reading, for whom he had been employed as a clerk of works from 1983 1988. He had supervised the demolition of an old library. There was evidence that the library contained some asbestos materials. There was no evidence, however, that the University had not taken proper precautions in the removal of that asbestos. The judge dismissed the claim.

16. The Court of Appeal held that while the evidence was sufficient to infer that the deceased came into contact with asbestos it was not sufficient to show, or support the inference, that the University had failed to take the necessary steps to protect him. The claimant was therefore unable to prove a breach of duty and the appeal was dismissed.

17. The analysis of the role and limits of inference was significant. The Court of Appeal held that a diagnosis of mesothelioma ineluctably implicated exposure to asbestos. Where there was only one employment in which asbestos could have occurred, the inference that it occur will be "practically irresistible". But where there are two or more such employments, the inference that exposure occurred in at least one of them will be equally irresistible, but it becomes a possibility that in one or more no such exposure occurred.

18. In **Abraham v G Ireson & Son (Properties) Ltd**[5] the Court was asked to determine whether or not there had been a breach of duty in a case involving relatively light exposure. The claimant worked for two defendants, small firms of builders and plumbers, between 1956 and 1965. The first defendant admitted that its workshop was a factory within the meaning of the **Factories Act 1937**. Swift J held that the claimant had sustained infrequent low level of exposure as a result of handling asbestos string and asbestos scorch pads. It was described as "light and intermittent". The level of exposure was much lower than that which had been experienced by the claimants in **Owen v IMI Yorkshire Copper Tube**[6] and **Shell Tankers UK Ltd v Jeromson**[7].

19. Swift J reviewed the relevant asbestos literature and held that during the relevant period of employment, before the publication of the Newhouse and Thompson paper, an employer without specialist knowledge could not reasonably be expected to have appreciated the risk of such exposure. Accordingly, there was no breach of the common law duty of care. The cause of action under the **Construction (General Provisions) Regulations 1961** also failed on the grounds that the employers could not have known that the dust was "likely to be injurious" and, further, that it would not have been reasonably practicable to guard against unknown risks.

20. This case may be contrasted with the more recent decision of Irwin J in **Anderson v RWE Power Plc**[8]**.** The claimant worked in the accounts office of a power station for a period of about 15 months in the late 1940s. He spent about 20 minutes each week touring the power station floor. Various activities at the power station, such as mixing and applying lagging, generated asbestos dust, but the claimant had no recollection of seeing such activities or being near to activities likely to generate asbestos dust or dust that was "likely to be injurious" according to the available knowledge in the 1940s. But the judge also held that these activities contributed significantly to the level of asbestos dust in the general atmosphere of the power station. The claimant contended that this materially increased his risk of mesothelioma and that the defendant was in breach of section 47 of the **Factories Act 1937** which required occupiers to take all practicable measures to protect persons

[5] [2009] EWHC 1958 (QB), 31 July 2009
[6] Unreported, 15 June 1995
[7] [2001] PIQR P265
[8] Unreported, 22 March 2010

employed against the inhalation of dust that was "likely to be injurious or offensive to the persons employed, or any substantial quantity of dust of any kind".

21. The defendant conceded that there was a breach of section 47. The dust generated by the various activities in the power station was likely to be injuries judged by the knowledge of the day. But, the defendant argued, the claimant was neither engaged in these activities or working nearby. Accordingly, he could not rely on these admitted and repeated breaches of duty. The 1937 Act was not intended to create liability for background levels of asbestos.

22. Irwin J accepted the defendant's contention that the background or environmental level of atmospheric asbestos would not constitute a breach of duty or create a foreseeable risk of injury at common law. But the judge found in the claimant's favour and held that he was within the scope of those owed a duty under section 47. The processes complained of had generated asbestos dust that was likely to be injurious to some of those employed. They had made a significant contribution to level of asbestos dust in the atmosphere. The claimant had inhaled some of that dust. This constituted a breach of statutory duty even if the claimant would not have been able to establish negligence.

Causation

23. The case of **Sienkiewicz v Greif (UK) Ltd** [9] raised some issue of potentially wider general importance.

24. The Claimant's mother worked at the defendant's factory in Ellesmore Port from 1966 until 1984. She worked in the office, not on the factory floor, but her duties took her to areas contaminated with asbestos dust. The judge held that defendant had been in breach of duty (there was no appeal on that point) and that the deceased had not been exposed to asbestos in any other period of employment.

25. But the key finding for the future conduct of the case was that the deceased, in common with the other inhabitants of Ellesmore Port, had been exposed to low levels of airborne asbestos in the general atmosphere in the area. The judge held that the deceased's occupational exposure to asbestos increased the risk that she would contract mesothelioma

[9] [2009] EWCA Civ 1159

by 18%. In other words, the risk created by her environmental exposure was significantly greater.

26. The defendant argued that it was this environmental exposure that had probably caused the disease and that the **Fairchild** exception did not apply because it would not have been impossible for the claimant to establish causation on a traditional "but for" basis if she had obtained the appropriate evidence.

27. On this basis, the judge dismissed the claim. He held that the claimant needed to show that the defendant's breach of duty had at least doubled her risk of mesothelioma to establish causation.

28. The Court of Appeal unanimously allowed the appeal but the two judgments took slightly different routes.

29. Smith LJ held that the judge was wrong in his approach to causation. She traced the history of the material contribution doctrine and held, following **Fairchild**, that it was necessary only for the claimant to show exposure had made a material contribution to the risk to establish causation in a mesothelioma case. This was underlined by section 3 of the **Compensation Act 2006** which permits the pre-requisite liability in tort to be established by showing a material contribution to the injury.

30. Accordingly, it was not necessary for the claimant to establish that the risk of mesothelioma had been doubled.

31. That approach to causation had been adopted in a number of recent cases – such as **Jones v Metal Box** (see above), **XYZ v Schering Healthcare Ltd**[10] (the oral contraceptive litigation) and **Novartis v Cookson**[11] (a case concerning bladder cancer) – and it now appears to be established that in cases of multiple potential causes, a claimant can prove causation by showing that the tort risk was more than doubled the an existing risk.

32. While this test would certainly be sufficient in a mesothelioma case, it is not necessary.

[10] [2002] EWHC 1420 (QB)
[11] [2007] EWCA Civ 1261

33. Clarke LJ agreed with Smith LJ but reached his decision without reference to section 3 of the 2006 Act. He relied on **Barker v Corus (UK) Ltd**[12], and the speech of Lord Hoffmann in particular, and its interpretation of the **Fairchild** exception. This led to the conclusion that **Fairchild**, where it applies, had created a new tort of negligently increasing the risk of injury. There was no reason why it should make any difference that it might have been possible to show that the exposure doubled the risk.

34. This approach is likely to be controversial. It does not rest easily with **Gregg v Scott**[13] and it creates a potentially curious tort of creating a risk of injury, but only where that injury has already occurred.

35. In **Willmore v Knowsley**[14] the claimant had some difficulty in establishing a possible source of exposure to asbestos. She sued the secondary school she had attended between 1972 and 1979. At trial, Nicol J made three separate findings of exposure involving the occasional disturbance of some asbestos ceiling tiles in the school. The exposure was, on any view, at a low level but the judge held, on the basis of evidence from Dr Rudd, that there was no safe level of exposure and no dose below which there was no risk. This exposure made a material contribution to the risk and the judge found in the claimant's favour.

36. The Court of Appeal upheld the judge's decision. While there was no direct evidence of exposure, there was perfectly adequate material from which it could be inferred.

37. Sedley LJ held that once exposure above a minimal level had been proved, a risk of harm was also established.

38. The principles articulated by the Court of Appeal in these cases were recently applied by HHJ Allan Gore QC in **Edwards v CW & MA Evans Ltd**[15].

[12] [2006] UKHL 20, [2006] 2 AC 572
[13] [2005] UKHL 2; [2005] 2 AC 176.
[14] [2009] EWCA Civ 1211
[15] Unreported. 24 June 2010

39. In that case, the Deceased worked as a driver for a haulier for about 6 months in 1966/67. He was exposed to asbestos as a result of loading and unloading asbestos boards and panels. The Defendant relied on expert engineering evidence and contended that the occupational exposure, in comparison with other sources of exposure, was so small (lower than 1% of the total dose according to the Defendant) that it could be dismissed as causally irrelevant.

40. HHJ Gore rejected these submissions. He held that the following propositions could be derived from the case law:

    (a) Section 3 of the **Compensation Act 2006** imposes on a culpable tortfeasor liability for the full value of the claim if the culpable exposure caused a material increase in the risk of the development of mesothelioma;

    (b) A material increase in the risk is not to be measured but merely distinguishes the material from the minimal or trivial or inconsequential;

    (c) Exposure is not minimal or trivial if it materially enhances the background risk;

    (d) If that threshold is passed, exposure is material and culpable even its contribution to the overall risk of mesothelioma was 1% or less.

41. The judge decided, in essence, that where there is more than one possible source, the exposure in question, and the attendant risk of mesothelioma, must be analysed in isolation and not in relative terms. If that exposure was sufficient to give rise to a risk of mesothelioma (and the threshold is very low), that represents a material increase of the risk, regardless of the volume of the other exposure or its relative contribution to the overall risk.

Conclusion

42. The defendants in **Sienkiewicz** and **Willmore** have appealed and the cases have been listed together for hearing by the Supreme Court in the autumn. There is potential for a wholly new set of arguments.

43. There is no end in sight to the mesothelioma epidemic or the litigation that follows in its wake.

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