The Scope and Limits of Acceptable Risk in Exposure Cases

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This blog looks back to the Supreme Court's decision in *Baker v Quantum Clothing Group Ltd* [2011] 1 WLR 1003 and discuss how the concepts of risk and acceptable limits of exposure now operate in modern-day disease litigation.

NIHL and the Code of Practice for Reducing Exposure of Employed Persons to Noise 1972

It is ten years since the Supreme Court handed down its judgment in the Nottinghamshire and Derbyshire Textile Industry Deafness litigation: *Baker v Quantum Clothing Group Ltd* [2011] 1 WLR 1003, wherein the majority of the Supreme Court Justices identified a generally acceptable standard of care in historical deafness claims.

The first-instance judge, and the Court of Appeal, had accepted that the Code of Practice for Reducing Exposure of Employed Persons to Noise 1972 ("the 1972 Code") provided the generally appropriate standard for employers with average knowledge in respect of noise at work. Lord Mance, who gave the leading judgment, noted at [28]:

"*The Code of Practice itself repeatedly refers to a "limit" defined in section 4.3.1 in relation to continuous noise exposure as 90dB(A)lepd… It also says, at section 4.1.1: "Where it is reasonably practicable to do so it is desirable for the sound to be reduced to lower levels", but this has to be read with section 6.1.3, which states: "Reduction of noise is always desirable, whether or not it is practical to reduce the sound level to the limit set out in section 4, and whether or not it is also necessary for people to use ear protectors. Reduction below the limit in section 4 is desirable in order to reduce noise nuisance.*"

Lord Mance acknowledged that if general standards of, or attitudes to, acceptable risk were left out of account, "*statistically identified risks at levels between 80dB(A) lepd (currently, at least, identified with no risk) and 90dB(A) lepd do not enable any easy distinction to be drawn within that bracket, if the elimination of all statistical risk is taken as a criterion*": see [30].

Lord Mance found no reason to disturb the judge's conclusion that the 1972 Code had been official and clear guidance which set an appropriate standard upon which a reasonable and prudent employer could legitimately rely until the late 1980s. The underlying statistical material did not undermine the 1972 Code's appropriateness as a guide to acceptable practice.

The Supreme Court also concluded that there was no such thing as an unchanging concept of safety: safety is a relative concept and foreseeability had to play a part in determining whether a place was safe. Had reasonable foreseeability not been imported into the meaning of safety, it would have been imported into reasonable practicability (under section 29 of the Factories Act 1961 for example); that meant that some degree of risk was acceptable, and that degree had to depend on current standards.

Citing Lord Hope in *R v Chargot Ltd (trading as Contract Services)* [2009] 1 WLR 1, Lord Mance reiterated at [66] that the Health and Safety at Work etc. Act 1974:

"*… was "not contemplating risks that are trivial or fanciful", that the statutory framework was "intended to be a constructive one, not excessively burdensome", that the law "does not aim to create an environment that is entirely risk free" and that the word "risk" which the statute uses "is directed at situations where there is a material risk to health and safety, which any reasonable person would appreciate and take steps to guard against*" (emphasis added).

The Noise at Work Regulations 1989 and the Control of Noise at Work Regulations 2005

The evolving standards of safety, in the context of occupational noise exposure, are evidenced by the statutory implementation of lower action levels over time.

Regulation 6 of the 1989 Regulations states: "*Every employer shall reduce the risk of damage to the hearing of his employees from exposure to noise to the lowest level reasonably practicable*".

Despite this, and with reference to Lord Mance's approach to similar provisions in the 1972 Code, regulation 2 prescribes "*action levels*" as follows:

- "*the first action level*" means a daily personal noise exposure of 85 dB(A);
- "*the peak action level*" means a level of peak sound pressure of 200 pascals;
- "*the second action level*" means a daily personal noise exposure of 90 dB(A).

Regulation 7 of the 1989 Regulations requires that "*Every employer shall, when any of his employees is likely to be exposed to the second action level or above … reduce, so far as is reasonably practicable (other than by the provision of personal ear protectors), the exposure to noise of that employee*".

The action levels were reduced further by the 2005 Regulations, with regulation 4 prescribing "*exposure action values*" and an "*exposure limit value*" as follows:

(1) The lower exposure action values are—
(a) a daily or weekly personal noise exposure of 80 dB (A-weighted); and
(b) a peak sound pressure of 135 dB (C-weighted).

(2) The upper exposure action values are—
(a) a daily or weekly personal noise exposure of 85 dB (A-weighted); and
(b) a peak sound pressure of 137 dB (C-weighted).

(3) The exposure limit values are—
(a) a daily or weekly personal noise exposure of 87 dB (A-weighted); and
(b) a peak sound pressure of 140 dB (C-weighted).

However, regulation 6 sets down more onerous requirements for the reduction of noise levels:

(1) The employer shall ensure that risk from the exposure of his employees to noise is either eliminated at source or, where this is not reasonably practicable, reduced to as low a level as is reasonably practicable.

(2) If any employee is likely to be exposed to noise at or above an upper exposure action value, the employer shall reduce exposure to as low a level as is reasonably practicable by establishing and implementing a programme of organisational and technical measures, excluding the provision of personal hearing protectors, which is appropriate to the activity.

A consideration of the extent of the duty under regulations 6(1) and 6(2) was undertaken by the Court of Appeal in *Goldsheider v Royal Opera House Covent Garden Foundation* [2020] ICR 1. This case involved a noise deafened violaist who suffered a traumatic injury to hearing during a rehearsal in which he was sat in close proximity to the brass section of the orchestra. The Court of Appeal held that the critical issue was whether the Royal Opera House could prove that it reduced exposure to as low a level as was reasonably practicable, and in particular whether it had taken all reasonable steps to reduce it to below 85dB. In concluding that the Royal Opera House was in breach of regulation 6, the Court of Appeal pointed to several shortcomings in the Defendant's evidence and noted that the orchestra pit had been reconfigured after the Claimant's injury to distribute the brass section, a matter upon which McCombe and Bean LJJ, who gave the leading judgment, placed particular reliance ([42]):

"*It is in our judgment particularly significant that the pit was reconfigured after 1 September with the brass instruments being split up. There is no evidence that this caused an unacceptable reduction (or indeed any reduction at all) in the artistic standards of the Ring cycle when it came to be performed in public. Alterations made by defendants after a workplace accident do not necessarily demonstrate liability retrospectively, but they do make it very difficult for the defendant to prove that all reasonably practicable steps had already been taken*".

In the authors' view, employers could argue that, by taking steps limiting exposure to the relevant exposure action levels or limit values, they are entitled to rely on these general standards as evidence of exposure to an acceptable risk of injury, even if statistically there may be some residual risk to those employees who are particularly susceptible. Such an argument will be of greater significance in cases concerning the 1972 Code or the 1989 Regulations where there is a recognised residual risk of injury below the prescribed lower action levels (unlike the 2005 Regulations where the lower exposure action value is 80dB(A), below which there is thought to be no residual risk of injury).

HAVS and the Control of Vibration at Work Regulations 2005

Although *Baker* concerned claims for noise induced hearing loss, there is on the face of it no reason why the concept of an acceptable risk should not apply to claims involving exposure to vibration.

Regulation 6 of the 2005 Regulations provides:

(1) The employer shall ensure that risk from the exposure of his employees to
vibration is either eliminated at source or, where this is not reasonably practicable, reduced to as low a level as is reasonably practicable.

(2) Where it is not reasonably practicable to eliminate risk at source pursuant to paragraph (1) and an exposure action value is likely to be reached or exceeded, the employer shall reduce exposure to as low a level as is reasonably practicable by establishing and implementing a programme of organisational and technical measures which is appropriate to the activity.

By analogy with the approach adopted by Lord Mance in *Baker*, and leaving aside the separate duty to provide information, instruction and training, it is potentially open to employers to argue that exposure below the exposure action level (2.5 m/s2 A(8), as per regulation 4(1)(b)) constitutes an acceptable risk, notwithstanding that many medical experts would agree that there remains some residual risk of injury below this level.

Asbestos-Related Injury

The position is less clear when considering cases concerning asbestos exposure. In *Williams v University of Birmingham* [2012] PIQR P4, a widow's claim following the death of her husband from mesothelioma as a result of exposure to asbestos in 1974 was dismissed. The Court of Appeal held that the standard of conduct to be expected was that of a reasonable and prudent employer at the time, but taking account of developing knowledge about the particular danger concerned (with specific reference to *Baker*). Aikens LJ at [61] stated:

"*In my view the best guide to what, in 1974, was an unacceptable level of exposure generally is that given in the Factory Inspectorate's "Technical Data Note 13" of March 1970, in particular the guidance given about crocidolite. The University was entitled to rely on recognised and established guidelines such as those in Note 13. It is telling that none of the medical or occupational hygiene experts concluded that, at the level of exposure to asbestos fibres actually found by the judge, the University ought reasonably to have foreseen that Mr Williams would be exposed to an unacceptable risk of asbestos related injury*".

TDN13 was entitled "*Standards for Asbestos Dust Concentration for Use with the Asbestos Regulations 1969*". The first section read as follows:

"*In this note guidance is given on how HM Inspectors of Factories will interpret the expression 'dust consisting of or containing asbestos to such extent as is liable to cause danger to the health of employed persons' and how the measurements may be made. It is emphasised that these notes have been prepared for the guidance of HM Inspectors since only the Courts can give binding decisions in these matters. It is important to bear in mind that these standards are provisional and may have to be revised from time to time.*"

However, in *Bussey v 00654701 Ltd (formerly Anglia Heating Ltd)* [2018] ICR 1242, the Court of Appeal overturned a decision dismissing a fatal accident claim by a widow whose husband had contracted mesothelioma at work, and remitted it for rehearing on the issue of liability. It was held that the judge at first instance was wrong to treat *Williams* as determining that there was a minimum level of exposure to asbestos below which such exposure presented an acceptable risk, whereas earlier authorities which had not been before the court in *Williams* had raised doubts as to whether such a minimum level existed.

In *Bussey*, the Court of Appeal referred to *Jeromson v Shell Tankers (UK) Ltd* [2001] ICR 1223, where two former employees of Shell developed mesothelioma when working in the engine rooms of ships in the 1950s/early 1960s. Hale LJ cited the well-known passages from *Stokes v Guest Keen and Nettlefold (Bolts & Nuts) Ltd* [1968] 1 WLR 1776 and *Thompson v Smiths Shiprepairers (North Shields) Limited* [1984] 2 WLR 522 and then said at [37]:

"*However, where an employer cannot know the extent of any particular employee's exposure over the period of his employment, knows or ought to know that exposure is variable, and knows or ought to know the potential maximum as well as the potential minimum, a reasonable and prudent employer, taking positive thought for the safety of his workers, would have to take thought for the risks involved in the potential maximum exposure. Only if he could be reassured that none of these employees would be sufficiently exposed to be at risk could he safely ignore it.*"

The Court of Appeal also had its attention drawn to *Maguire v Harland & Wolff plc* [2005] PIQR P21, where the wife of a boilermaker developed mesothelioma as a result of washing her husband's clothes between 1961 and 1965. Judge LJ identified that "*In truth the alarm did not sound until late 1965, when it began to be appreciated that there could be no safe or permissible level of exposure, direct or indirect, to asbestos dust*": see [57].

At [43] of *Bussey*, Jackson LJ rejected the submission of Counsel for the Claimant that Aikens LJ's use of the word "*unacceptable*" in *Williams* should be omitted. However, he qualified this by stating that "*The residual risk or the risk which remains after taking all proper precautions may be regarded as an "acceptable" risk*." Jackson LJ was of the view that TDN13 did not establish a "*bright line*" to be applied in all cases arising out of the period 1970 to 1976. He concluded that TDN13 was not a general yardstick for determining the foreseeability issue. Nevertheless, he held that in *Williams*, TDN13 was properly taken into account in addition to the expert evidence, given the low levels of exposure. Conversely, in *Bussey* the employer knew that the exposure was variable. As such, and applying *Jeromson*, it was only if the employer could be reassured that none of these employees would be sufficiently exposed to be at risk of injury, could it safely ignore it.

Underhill and Moylan LJJ concurred that the appeal should be allowed for the reasons given by Jackson LJ, save that they expressed concerns about the categorisation of risks as being either acceptable or unacceptable. They considered that to seek to address whether a particular risk is acceptable or unacceptable could well lead to confusion rather than assisting the court in determining the critical question of the foreseeability of the relevant risk.

Therefore, in the area of asbestos-related disease, there remains no clear approach as to the application of the concept of acceptable risk. There can be no doubt, however, that where there is clear general guidance, it remains a relevant factor in determining the extent of a foreseeable risk.

Hazardous Substances and the Control of Substances Hazardous to Health Regulations 2002

Given the vast array of substances which may be hazardous to health, it is only possible to be fairly generic in respect of the notion of acceptable risk in the COSHH context.

The key duty in relation to exposure to substances hazardous to health is found in regulation 7(1) of the Control of Substances Hazardous to Health Regulations 2002 ("the COSHH Regulations"):

Every employer shall ensure that the exposure of his employees to substances hazardous to health is either prevented or, where this is not reasonably practicable, adequately controlled.

Where prevention is not reasonably practicable, the adequacy of control measures is determined by reference to regulation 7(11):

In this regulation, "*adequate*" means adequate having regard only to the nature of the substance and the nature and degree of exposure to substances hazardous to health and "adequately" shall be construed accordingly.

As was highlighted by the Court of Appeal in *Dugmore v Swansea NHS Trust* [2003] ICR 574, at [25] of the judgment of Hale LJ:

"*"Adequately" is defined in regulation 7 without any reference to reasonableness or the foreseeability of risk: it is a purely practical matter depending upon the nature of the substance and the nature and degree of the exposure and nothing else*."

Whilst we have considered in the previous sections that it is open to employers to argue that acceptable risk should be assessed by reference to the statutory exposure/action levels, regulation 7(7) would appear to preclude this in the COSHH context where inhalation is concerned:

Without prejudice to the generality of paragraph (1), where there is exposure to a substance for which a maximum exposure limit has been approved, control of exposure shall, so far as the inhalation of that substance is concerned, only be treated as being adequate if the level of exposure is reduced so far as is reasonably practicable and in any case below the maximum exposure limit.

Thus, for the purpose of regulation 7(7) the question is seemingly not whether reasonably practicable steps have been taken to reduce the exposure level below the "*maximum exposure limit*", but rather whether the employer has reduced the level of exposure so far as is reasonably practicable per se.

However that seemingly very stringent requirement is ameliorated by regulation 7(8) which says:

"*Without prejudice to the generality of paragraph (1), where there is exposure to a substance for which an occupational exposure standard has been approved, control of exposure shall, so far as the inhalation of that substance is concerned, only be treated as being adequate if—*
(a) that occupational exposure standard is not exceeded; or
(b) where that occupational exposure standard is exceeded, the employer identifies the reasons for the standard being exceeded and takes appropriate action to remedy the situation as soon as is reasonably practicable."

This appears to give some statutory basis for the advancement of a *Baker*-type argument in the COSHH context, with the "*occupational exposure standard*" indicating the level of acceptable risk. The ability to evidence exposure levels will therefore be of paramount importance to employers in successfully defending COSHH claims.

Of course, since the implementation of Section 69 of the Enterprise and Regulatory Reform Act 2013, the COSHH Regulations no longer give rise to a direct cause of action and a claimant must prove negligence on the part of his/her employer. To that end, and in post-ERRA cases, it could still be argued at common law the control of exposure could be deemed to be adequate or "*acceptable*" where the employer can show that exposure was below the maximum exposure level and/or workplace exposure limits, by analogy with *Baker*.

Conclusion

In cases involving historical exposure to occupational noise, employers should argue that the concept of acceptable risk is best judged by the statutory limits set out in the Regulations/standards in place at the time of exposure. Arguably, the same approach could be taken in cases of vibration exposure.

The position is less clear in relation to asbestos related injuries, where judicial concern has been expressed about the categorisation of risks as being either acceptable or unacceptable.

In claims involving exposure to other substances hazardous to health, regard must be had to the nature of the substance and the nature and degree of exposure. However, in line with regulation 7(8), and by analogy with Baker, employers should argue that the MEL/WEL for the particular substance in question provides a good guide as to the level of acceptable risk.