

# Hearing Protection

## The Law - an overview

### Hearing Damage

#### - An Unseen Problem

*The development and implementation of legislation for the protection of employees' hearing probably had one of the most difficult beginnings of any legislation in the safety field, due mainly to the insidious way hearing difficulties develop and show themselves. However since the recognition of noise as a major health hazard, the legislation governing this area has seen vigorous application and significant developments by manufacturers of both practical and efficient, as well as comfortable hearing protection.*

The Noise at Work Regulations 1989 were the first to tackle the problem of noise in the workplace by indicating intervention levels and apportioning responsibility for the protection of employees and the supply of protective equipment. In summary the regulations state that Employers must reduce the risk of damage to the hearing of their Employees from exposure to noise to the lowest level practicable. If the noise levels cannot be reduced sufficiently to avoid potential harm to Employees hearing, then at a noise level of 85dBA Employers must issue personal ear protection on request. At 90dBA, Employers must designate ear protection zones, and ensure that employees wear ear protectors wherever they have to work with noise exceeding that level. Employees must co-operate by wearing ear protectors, as failure to do so could render both themselves and their Company liable to prosecution.

With the implementation of the PPE at Work Regulations 1992, there is a further overriding responsibility placed on Employers to ensure the employees' safety. The regulations require that Employers assess the Health & Safety Risks to employees in the workplace and where appropriate issue suitable PPE. In addition, Regulation 9 demands that employees must be fully trained in the use of any PPE supplied.

#### Choosing Hearing Protection - What do I Need to Look for?

To choose the correct hearing protection for any given situation you need to know how 'loud' the noise is and how it is made up i.e. high piercing tones or low base tones. To do this accurately a Noise Attenuation Survey should be carried out. The survey will provide specific information on the total amount of noise in an environment in dB (decibels) and break the noise down into specific frequency ranges or octave bands, indicating whether the noise consists of high, medium or base tones or a combination and at what volumes dB.

#### H.M.L

The attenuation readings taken together indicate the Protection Profile that is required from the hearing protection device and is stated in terms of the HML figures. These figures are a simple method for comparing the noise reduction properties of any hearing protector in terms of the noise reduction they offer at High, Medium and Low frequencies.

#### SNR

Another set of figures you will see are those for SNR (simplified noise reduction) which indicate the average level of protection a device can offer across the frequency level between 63Hz and 8000Hz.

As a broad measure of average protection, there is not enough information contained within this figure to make definitive comparisons between hearing protectors, it can only be used as an indicator of the general noise level that the protector is designed to deal with e.g. in very broad terms (these figures should in no way be taken as definitive) a device with an SNR of between 24 & 28 will protect against noise containing primarily high frequencies at fairly high volumes, a device with an SNR of between 29 & 31 will protect against high and lower frequencies at increased volumes and a device with an SNR between 32 & 36 or more will protect against very low frequencies (bass tones) & high frequencies at extremely high volumes.

H.M.L & SNR are therefore only guides to the protection levels afforded by particular devices, for a definitive 'fit' to your specific requirements, you should always refer to the results of an audiometer test / noise attenuation survey.

**To arrange for noise attenuation survey to be carried out at your premises, please contact the sales team at SBA.**

## The Law - is changing

European legislation is currently being re-drafted, lowering the action levels (to be known as action values) at which hearing protection must be worn. At the lower level the value will drop from 85dB to 80dB, and at the second level it will drop from over 90dB to 85dB.

It is anticipated that these changes will be accepted by Parliament in March 2005 and come into force in February 2006.

At its simplest, the impact of the new legislation will be to make the wearing of hearing protection, which is currently optional (over 85dB), compulsory - more areas within the work place will consequently be designated as 'Hearing Protection Must be Worn'.

**If you have any questions relating to the forthcoming changes, or would like help in preparing for them, then please contact SBA sales team.**