

GIVING CUSTOMERS SOUND ADVICE

In preparation for compliance with the new Control of Noise at Work Regulations 2005, global construction company Laing O'Rourke and leading occupational health and environmental safety specialist 3M have joined forces to produce a comprehensive report on construction site health and safety, with particular emphasis on hearing protection. The objective of the collaboration was to offer both companies the opportunity to identify typical activities that fall within the new regulations, assess the suitability of current hearing protection, and address any future hearing protection issues by reviewing protective products, services and risk control. The construction company's drive to continually improve workplace safety levels initiated the project with 3M. Laing O'Rourke's Graduate Management Trainee Andrew Mackin worked with 3M Occupational Health and Environmental Safety specialist Vikki Nash to conduct a 3 month survey of approximately 10 Laing O'Rourke sites in the UK.

Findings

The survey's results showed that during general site measures operatives were typically exposed to noise levels of around 82dB (A). The use of equipment such as circular saws increased the levels to approximately 109dB(A). The Upper and Lower Exposure Action Values take into account the amount of time that employees work at a particular noise level. For example, it takes just one minute for an operative exposed to 109dB(A) before the Upper Exposure Action Value of 85dB(A) is reached.

Higher frequency noise levels were recorded in activities such as metal-on-metal contact (for example when sawing pipes and hammering on falsework) while slightly lower frequency levels (but generally still above 85dB) were recorded during piling works and general works involving plant operation.

Choice of protection

Whether noise is of a high or low frequency is of particular importance when trying to control the risk of hearing damage. "The level of attenuation provided by earplugs and earmuffs vary considerably over different frequencies and products. Hearing protectors should not over-attenuate as workers need to be able to communicate; to hear instructions, warnings and approaching vehicles" explained Vikki Nash.



"Other vital considerations in choice of hearing protective equipment are comfort, compatibility with other personal protection equipment (PPE) and ease of use. Even if workers are aware of the importance of wearing PPE, this research has shown that they will not wear safety products if they are uncomfortable, tricky or time consuming to apply. Standard disposable earplugs which are typically provided often take longer to roll and install correctly than the duration of the noise exposure itself. A more practical solution would be 3M™ 1310 Banded Ear Plugs or 3M™ 1450 Helmet Mounted Ear Muffs, which require minimal fitting."

The result

Gary Fisher, Safety Leader for Select Plant Hire Co Ltd, (part of the Laing O'Rourke Group) concluded, "The partnership with 3M has been very successful in identifying current and future issues relating to the health and safety of our construction site workers. Laing O'Rourke is currently looking at a number of internal measures to improve the hearing protection on sites."

Vikki added, "We are delighted to have had the opportunity to work with a major construction company like Laing O'Rourke. This is the first in what will be an ongoing programme of Health and Safety related projects that the two companies will be co-working on. Partnerships like this enable 3M to keep at the forefront of health and safety and enable the continual research and development of new 3M products and services to meet and exceed changing industry requirements."

Up-to-date Health and Safety help and advice is available via our dedicated construction website at www.3m.com/uk/construction, including our online HPE Selector tool for other construction companies needing to update their HPE in order to comply with the new regulations".



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