Noise at Work: Guidance for the music and entertainment sectors within the University

Introduction

Noise at Work Regulation 2005 (NAWR) apply to the music and entertainment sector from 1st April 2008

In April 2008 the existing Regulations protecting workers in the music and entertainment sectors from exposure to excessive noise will be replaced by the Control of Noise at Work Regulations 2005 (Noise Regulations). For other industry sectors these Regulations have been in force since April 2006. The European Directive (2003/10/EC) on which the Regulations are based allowed the music and entertainment sectors a two-year transitional period. This recognised that music is unusual as it is noise deliberately created for enjoyment and therefore practical guidelines are necessary to help workers, employers and freelancers in the music and entertainment sectors protect their hearing and safeguard their careers.

Music and entertainment sectors are defined in the Noise Regulations as all workplaces where a) live music is played or b) recorded music is played in a restaurant, bar, public house, discotheque or nightclub, or alongside live music or a live dramatic or dance performance. In this University the Regulations will therefore have significant implications for the School of Arts, Culture and the Environment's subject area of Music, Accommodation Services, Edinburgh First, George Square Theatre and EUSA

Accessing guidance

The HSE have not yet published official Guidance documents relating to this sector of the NAWR, publication date for this is July 2008. In the meantime a DRAFT copy of the web version of the guidance Sound Advice can be accessed at: http://soundadvice.info/ it is not expected that the final version will differ significantly from this draft.

Sound Advice lays out the recommendations of the Music and Entertainment Sector Working Group, this is a group of experts from different sectors in the music and entertainment industry who have worked together with the Health and Safety Executive (HSE) to identify good practice. On this site you will find out what you can do to avoid the harmful effects of prolonged exposure to noise - for yourself and for the people you employ or work with. You will be able to check your responsibilities and get venue orientated advice.

Specific information for those running pubs, clubs and functions can be accessed from the British Beer Pub Association online.

For those working with orchestras, or involved in live music teaching, comprehensive guidance can be found on the Musicians Union site online.

Some common misconceptions are addressed by the HSE online.

Personal Protective Equipment (Earplugs)

Flat response earplugs are recommended for musicians and others where it is important to be able to hear the subtleties of the music passages whilst reducing the harmful noise volume. The most effective would appear to be those that are custom fitted to the individual's ear and whilst they are more expensive than generic sized earplugs they will last much longer. Below are links to some commercial websites that supply both custom fit and generic flat response earplugs. Please note this is supplied for information only and the Health and Safety Department does not endorse any of these products. Good music shops may also stock these products.

- Sensorcom
- For those working in pubs or clubs, either behind the bar or collecting glasses, normal type earplugs as supplied by a reputable retailer of personal protective equipment should suffice.

Further guidance will be published on this site as it becomes available from the Enforcing Authority but in the meantime you are urged to act upon the significant guidance supplied here as it is likely that the Enforcing Authority will be making unannounced visits to clubs, pubs and music venues in the not too distant future to ensure compliance.

Aim of the NAWR

The aim of the Noise Regulations is to ensure that workers' hearing is protected from excessive noise at their place of work, which could cause them to lose their hearing to some degree and/or to suffer from tinnitus (permanent ringing, whistling, buzzing or humming) in the ears). Noise is an insidious hazard as its harmful effects are not instantly obvious and years may pass before an individual becomes aware that their hearing is impaired. Unfortunately there is no cure, or medical ameliorative treatment for noise induced hearing loss or tinnitus.

Risk Assessment

The purpose of the risk assessment is to enable you as the employer to make a valid decision about whether your employees are at risk from exposure to noise and what action may be required to prevent or adequately control that exposure. It also enables you to demonstrate to others who have a valid interest e.g. employees representatives and enforcement authorities that you have, from the earliest opportunity, considered:

- all the factors related to the risks from noise exposure
- the steps which need to be taken to achieve and maintain adequate control of the risks
- the need for health surveillance

- how to put the steps you have decided upon into action Remember, you risk assessment must take into account all noise exposure at work, including for example; piped music, personal stereos/MP3 players, glass handling, live bands, discos, teaching/tutorial sessions where live music is played, etc.

You are not required to make a highly precise or definitive assessment of individuals exposure, such as would be obtained by making detailed measurements. The NAWR require you to make measurements of noise "if required". However your assessment must be a reliable estimate with sufficient precision for you to be able to show whether action values are likely to be exceeded. Your assessment will only be reliable if it uses data that is reasonably representative of individual's exposure. Published representative data can be had from trade associations, industry sector publications, equipment manufacturers noise data, etc.

Your assessment must be reviewed if it no longer reflects the current noise risk, e.g. you change the way of working, alter shift patterns, install new equipment, you have introduced noise-control measures following a previous assessment, you become aware of new ways of working or improved noise-control techniques that could be applied to your workplace.

Risk assessment – subjective warnings and tests to decide on need for noise reduction action or more detailed quantitative risk assessment

Physical warning signs that people have been subjected to noise levels that could damage their hearing are temporary deafness, a buzzing, or ringing in the ears after leaving a noisy place. Although hearing recovers within a few hours, this should not be ignored, it is in fact a sign that if the person continues to be exposed to that level of noise their hearing could be permanently damaged. If a person does continue to expose themselves to noise levels that elicit such symptoms eventually the recovery time to normal hearing takes longer until the persons hearing never fully recovers and they experience a permanent threshold shift in their ability to hear.

Subjective tests to assess whether noise levels are likely to cause harm are:

1. Conduct a conversation with someone standing approximately 1m away, if you can carry on normal conversation, but the noise is intrusive (like a noisy street, or typical vacuum cleaner) then the noise level could be around 80dB(A), the Lower Exposure Action Value (LEAV), and a more detailed risk assessment should be undertaken if people work in this noise level for a significant part of their working day - say 6hrs.
2. Stand approximately 2m from another person and conduct a conversation, if voices have to be raised considerably (shout) to conduct the conversation the noise level could be around 85dB(A), the Upper Exposure Action Value (UEAV), which poses a significant risk of hearing damage and a more detailed risk assessment should be undertaken if people work in this noise level for more than 2hrs per day.

3. Stand approximately 1m from another person and conduct a conversation, if voices have to be raised considerably (shout) to conduct the conversation the noise level could be around 90dB(A), well above the UEAV, this noise at this level is very likely to damage hearing and a more detailed risk assessment should be undertaken if people work in this noise level for more than 45mins per day.

It is suggested that the above subjective test scenarios are undertaken in bars, clubs, or venues operated by University Schools or Support Units where music, either live or electronic is played and also in areas where academic staff are involved in teaching scenarios where musical instruments are played.

Risk assessment – quantitative tests and detailed risk assessment

If the above test scenarios show that harmful levels of noise are likely to be present then you may go on to take such measures that will eliminate or control the noise level to the lowest level reasonably practical. It is suggested that you should be aiming for a level at, or slightly below, the LEAV, however care should be taken not to over attenuate the noise where employees will feel isolated, or more importantly cannot hear warning signals such as fire alarms.

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Elimination or control of exposure to noise in the workplace

If an employee(s) daily or weekly exposure is found to be at or above 80dB(A), a peak sound pressure of 135dB(C), then they must be informed that there is a risk of their hearing being damaged and hearing protection in the form of appropriate ear defenders, or ear plugs, must be made available to them although the employer has no duty to ensure that an individual wears them.

If an employee(s) daily or weekly exposure is found to be at or above 85db(A), a peak sound pressure of 137dB(C), then measures must be taken to reduce the noise exposure of that/these individual(s) by introducing a formal programme of noise reducing measures, other than providing hearing protection e.g. limiting time of exposure, reducing noise level at source, building works to create a safe haven. If such reasonably practicable measures do not reduce the daily/weekly exposure to below 85dB(A) then you must, in addition to these measures, provide your employees with suitable hearing protection and you must ensure that it is worn. If in

any area of the workplace an employee is likely to be exposed to noise at or above the UEAV for any reason the employer must ensure that:

- the area is designated a Hearing Protection Zone
- the area is demarcated and identified as such by a the sign specified in the Health and Safety (Safety Signs and Signals) Regulations 1996 the purpose of indicating that ear protection must be worn
- so far as is reasonably practicable that no employee enters that area unless wearing personal hearing protection that eliminates the risk to hearing, or reduces it to a level that is as low as is reasonably practicable.

There is cited in NAWR Exposure Limit Values (ELV) of 87dB(A), and a peak sound pressure of 140dB(C), these are the levels of noise above which an employee may not be exposed. In applying the exposure limit values, but not in applying the exposure action values, account shall be taken of the protection given to the employee by any personal hearing protectors provided.

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Health surveillance

If the risk assessment indicates, without taking account of the noise reduction provided by hearing protection, that employees who are exposed to noise, or are liable to so be, health is at risk then you must ensure that such employees are placed under suitable health surveillance.

There is strong evidence to show that regular exposure above the UEAV can pose a risk to health. You should therefore provide health surveillance for those workers regularly exposed above the UEAV. Where exposure is between the lower and upper exposure action values, you should provide health surveillance if you find out that an individual may be particularly sensitive to noise. This information may come from past medical history, previous audiometric test results from previous jobs, a history of being exposed to noise above the UEAV, or there may be a family history of becoming deaf early on in life.

Health surveillance can be provided by the Health and Safety Department's Occupational Health Unit based in Drummond Street. They can be contacted via telephone: 650 8190.

What do you need to tell your employees?

It is important that employees understand the risks they may be exposed to. Where they are exposed above the lower exposure action values you should at least tell them:

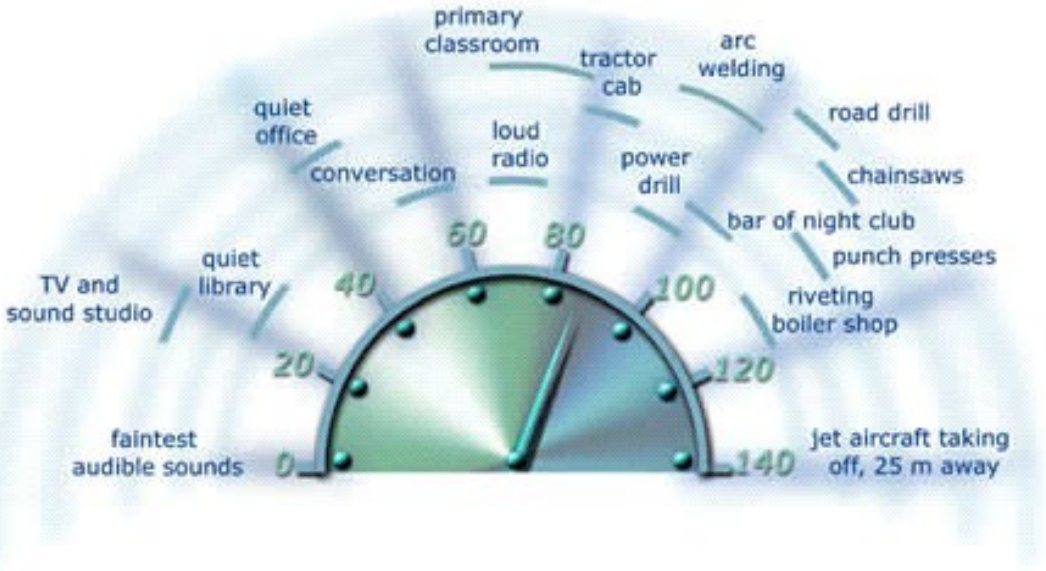
- the likely noise exposure and the risk to hearing this noise creates;

- what you are doing to control risks and exposures;
- where and how people can obtain hearing protection;
- how to report defects in hearing protection and noise-control equipment
- what their duties are under the Noise Regulations 2005;
- what they should do to minimise the risk, such as the proper way to use hearing protection and other noise-control equipment, how to look after it and store it, and where to use it;
- your health surveillance systems. Make sure you give information in a way the employee can be expected to understand (for example you might need to make special arrangements if the employee does not understand English or cannot read).

Employee and safety representatives

Consulting with trade union-appointed safety representatives or other employee representatives is a legal requirement. Working with safety representatives and employees' representatives is a very useful means of communicating about health and safety matters in your workplace. For example, discuss with them your risk assessment and action plan, including any proposal to average exposure over a week, selection of hearing protection, any hearing protection zones and your health surveillance programme.

Some examples of typical noise levels



How is noise measured?

Noise is measured in decibels (dB). An 'A-weighting' sometimes written as 'dB(A)', is used to measure average noise levels, and a 'C-weighting' or 'dB(C)', to measure peak, impact or explosive noises. You might just notice a 3 dB change in noise level, because of the way our ears work. Yet every 3 dB doubles the noise, so what might seem like small differences in the numbers can be quite significant.

Sign to designate a hearing protection zone

For further information concerning the above, please contact the Occupational Hygiene Unit 51 4261

Document version

Version number	Summary of change	Date and by whom
V1.0	New template	June 2023 HE

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