

Noise in the Music and Entertainment Sectors

Information Sheet

December 2012

Noise at work

In February 2008, the Noise at Work Regulations 2007 came into force for the music and entertainment sector in Ireland. The regulations mean that employers have a legal duty to protect their staff from the potential harmful effects of loud music.

The regulations apply to any workplace where there is live or recorded music. This includes music played in a restaurant, bar, pub, nightclub, or music played alongside live dramatic or dance performance. The regulations apply to all staff – this means everyone from musicians and DJs, to bar and security staff.

We know that music is at the heart of this industry and these regulations are not trying to change that. There are lots of simple and straightforward ways to protect against hearing damage, without compromising on the quality of the venue or the music.



As it first affects the precision of hearing, noise-induced hearing loss and other disorders not only affect the employee's enjoyment of music, but may threaten his or her career. Hence, what is a pleasure and almost harmless for consumers at a single event may be an occupational hazard for employees due to their repeated long-term exposure. The primary responsibility for noise control rests with the employer. Employers in the music and entertainment sectors may include, for example, concert promoters, venue owners, theatrical producers, contractors and publicans. Under the Noise Regulations employers are required to:

- Assess the risks to employees from noise at work.
- Take action to reduce the noise exposure that produces those risks.
- Make sure the legal limits on noise exposure are not exceeded.
- Provide employees with information and training.

- Carry out health surveillance where there is a risk to health.
- Provide employees with hearing protection if the noise exposure cannot be reduced enough by using other methods.

Employees also have responsibility for complying with the Noise Regulations. Employees in the music and entertainment sectors may include, for example, musicians and other performers, disc jockeys, service staff, technical staff, security staff, first-aid workers and cashiers. Under the Noise Regulations employees have a duty to:

- Use control measures in accordance with their employers' instructions.
- Wear hearing protection according to their employers' instructions.
- Take care of hearing protectors and noise control equipment.

- Report faults and difficulties in using noise control equipment.
- Make themselves available for health surveillance.

There are many ways of reducing noise and noise exposure—often a combination of methods work best. There is a hierarchical approach for controlling any risk. Controls which protect all the exposed people should always be preferred to individual protection measures. In broad terms the hierarchy of approach for the control of noise should be in order of preference to:

- Eliminate the hazard altogether – whenever practicable, do not generate hazardous levels of sound in the first place, turn amplified sound down.
- Control the risk -reduce the volume
 - physically separate people from the hazard
 - reduce the number of people exposed
 - reduce the duration of exposure.
- Provide personal protection equipment (PPE) in the form of personal hearing protection. Personal hearing protection is always the last resort as it is merely protective rather than preventative.

Facts and fallacies

Everyone will have to wear ugly ear defenders at concerts

This is not true. The Control of Noise at Work Regulations 2007 only require hearing protection for employees when, despite other controls being in place, the employees average daily or weekly exposure is at or above a particular threshold. For employees, there are many discreet hearing protection options, including in-ear monitors, flat response earplugs specially designed for musicians or normal earplugs for those who do not need to hear the music. Headsets have their place for example for security staff, where they can usefully combine communications capability with hearing protection. By protecting employees hearing they



will hopefully have a long and prosperous career. With damaged hearing this will be more difficult to achieve.

Members of the public are at reduced risk from exposure to noise since they attend concerts relatively infrequently when compared to employees who may be exposed regularly to high noise over a lifetime.

I don't have to wear hearing protection if I don't want to. It's a free country

Under the Control of Noise at Work Regulations 2007, an employee has a legal duty to wear hearing protection in a hearing protection zone or where instructed by his or her employer. They also have a duty to report any defects they find in the hearing protection provided. Failure to comply with these legal duties is an offence under the law.

Earplugs are useless

When properly worn, earplugs have their place in protecting employees hearing, assuming exposure cannot be reduced by other means. If earplugs are needed, the important thing is to choose the right type, many of which are now specially designed for musicians so that the full range of frequencies can be heard. For example while disposable earplugs may be okay for glass collectors where sound quality is less of an issue, uniform attenuation (flat response) earplugs are likely to offer more suitable protection for live music performers. We recognise that it takes time to adjust to wearing earplugs in an orchestra but their

need is now recognised as a last resort once all other protection methods have been tried.

You can't hear people speaking when you're wearing earmuffs or earplugs

Wearing earmuffs or earplugs should make it easier to understand speech in a noisy environment, because much of the background noise is screened out. There are also flat response earplugs so that you can still hear all frequencies and, if required, earmuffs that block background noise but allow the sound from human speech to pass through.

Wearing hearing protection gives you ear infections

Ear infections are unlikely to be caused by wearing hearing protection if good hygiene is adhered to. This means that hands should be clean when inserting and removing plugs, disposable plugs should be discarded after each use and reusable plugs washed in warm soapy water and thoroughly dried before reuse. Earmuffs are less likely than earplugs to contribute to ear infections although the cushions should be periodically wiped or washed clean. Employees who are suffering from an ear infection or are susceptible to infections should wear earmuffs. Employees should be consulted about which hearing protection is most suitable for them and feedback from employees should be considered in purchasing hearing protection devices.

If I have a hearing check or admit to hearing loss I'll lose my job

Employees are urged to see hearing checks as a positive way of preserving their hearing. For some the test will reveal no problems, for others that hearing is in the early stages of damage and for a few the results may confirm their own fears, that their hearing has been permanently damaged. However, any disciplinary action or dismissal cannot be based on the results of a hearing test.

Many in the music and entertainment industry are self-employed. While they are not required to provide

themselves with health surveillance, it is strongly recommended that all freelancers have regular hearing checks. Results of these tests would go to the freelancer rather than an employer.

Hearing aids can restore hearing

While hearing aids can be a great help to many deaf or hard of hearing people, they cannot restore hearing that has been lost.

All loud noise is dangerous

This is not strictly true. There is a tendency when talking about risk to consider only the level of noise exposure and not the duration of exposure. There is also a tendency to sensationalise the risks of non-occupational exposure.

There is also confusion over the annoyance and temporary effects of a loud exposure (for example TTS or temporary threshold shift) which are widespread and the risk of permanent hearing damage, which is minimal. Studies show that most listeners sustain moderate TTS and recover within a few hours to a few days after exposure. The risk of sustaining permanent hearing loss from attending rock concerts is small and limited to those who frequently attend such events.

Audiences will have to wear ugly ear defenders at concerts

This is not true. The Regulations do not apply to members of the public. When attending concerts they are making an informed choice to do so. They attend relatively infrequently when compared to employees. However, members of the public can and do buy their own earplugs.

If I like music, it is less damaging to my ears

If your ears are regularly exposed to the equivalent of excessive industrial noise levels you are at risk of hearing damage, irrespective of whether music is enjoyable or not. While music we like may be less stressful, that in itself does not act as a mechanism to prevent hearing damage. Noise exposure is determined by the volume of sound and the duration for which it continues.

Public

There is currently no legislation directly protecting the general public from the danger that loud music poses to their hearing. It is extremely important that you take responsibility for your own ears.

Loud music at clubs, gigs and festivals and through personal music players can cause damage to your hearing. This could mean permanent tinnitus (ringing in the ears) or premature hearing loss. Many people experience some ringing in their ears after listening to loud music; this is a warning sign that they may be damaging their hearing.

The risk of damage is determined by how loud the music is, how long you are exposed to it and individual susceptibility to noise.

Without sound measuring equipment it can be difficult to know how loud the sound really is. As a rule of thumb, if you have to raise your voice to speak to someone two metres away, the noise is loud enough to damage your hearing and you should take steps to protect yourself. If the sound ever hurts your ears, leave immediately. The louder the volume the less time you can listen to it without damaging your hearing.

Loud music affects everyone's hearing. Some people may be more susceptible to damage than others but it is only possible to know your susceptibility once you have damaged your hearing. So it is important to take steps to prevent any damage from occurring.

If you have been exposed to loud music, you may experience ringing in your ears. This is usually temporary and tends to go after 24 hours at most.

However, continued exposure to loud music can lead to the ringing, or tinnitus, to become permanent. This has been known to affect people's lives, their ability to sleep and concentrate.

You may also experience premature hearing loss. While you may not notice this straight away, it could bring on hearing loss as a result of age much quicker.

Clubs, gigs:

With music at nightclubs and live gigs often reaching dangerous levels for your hearing, it is important to take steps to prevent the damage occurring.

The best way to protect your hearing is to use earplugs that are designed for listening to music.

Other advice includes:

- Don't get too close to the speakers – the closer you are, the more noise reaching your ears.
- Take breaks – if there is a chill out area at the club, use it.

Children:

Small children have tiny ears that can be more sensitive than adult ears to certain high-pitched sounds.

If your child is crying or complaining when they are around loud noise, it is probably because it is hurting their ears.

Their ears are still growing, so earplugs are not always suitable for young children.

The best way to protect your child's hearing is to avoid or reduce the exposure in the first instance, if this cannot be achieved then protect your child's hearing by using ear defenders that are designed for children.

Sources of further information

Contact the Health & Safety Authority at wcu@hsa.ie or LoCall 1890 289 389.

Safety, Health and Welfare at Work (General Application) (Amendment) Regulations 2007 (Chapter 1 of Part 5 – Control of Noise at Work), available at www.hsa.ie

Guidelines to the Safety, Health and Welfare at Work (General Application) (Amended) Regulations 2007 (Chapter 1 of Part 5 – Control of Noise at Work), available online at www.hsa.ie

The Noise of Music – Sound advice for the music and entertainment sectors, available at www.hsa.ie