

# Independent Guide

## Why is noise an important issue in the workplace?



Independent workplace compliance

### Why is noise an important issue in the workplace?

Hearing loss, caused by exposure to noise in the workplace, continues to be a major occupational disease. According to the HSE, an estimated 15,000 people working during the last year suffered from noise induced hearing loss that was caused or made worse by work. This is based on data from the Labour Force Survey (averaged over 2011/12, 2013/14 and 2014/15), equating to a rate of 48 causes per 100,000 people employed in the last 12 months.

### Why is noise hazardous to health?

One-time exposure to a very loud noise (such as an explosion) and prolonged exposure to loud noise (such as in a factory), can both lead to hearing loss. This is caused by damage to the structures within the inner ear. Hearing damage can also leave people suffering a permanent sensation of "ringing in the ears" called tinnitus. Once hearing is damaged there is no cure and it may only be detected when it is too late for preventative action.

### What are the legislative requirements concerning noise in the workplace?

The Control of Noise at Work Regulations 2005 replaced the Noise at Work Regulations 1989. The Regulations aim to increase employees' protection by reducing exposure limits and enforcing noise control measures.

By law, employers must assess the risks from noise in the workplace and take specific action when certain noise exposure levels are reached. These exposure levels are called action values and are based on an 8 hour time-weighted average i.e. an average working day of 8 hours (or a 40 hour weekly average if exposure is less frequent).

The lower exposure action values are 80 dB(A-weighted) over an average working day or week, and 135 dB(C-weighted) peak noise. The upper exposure action values are 85 dB(A-weighted) over an average working day or week, and 137 dB(C-weighted) peak noise. The specific measures that must be taken when these action values are met include training, provision of hearing protection, health surveillance, and reductions in noise levels, for example by adapting machinery.

The exposure limit values are 87 dB(A-weighted) over an average working day or week and 140 dB(C-weighted) peak noise, these must not be exceeded without hearing protection.

### How do I know if my employees are exposed to high noise levels?

You can use the information provided by your industry and equipment manufacturers to estimate noise levels in your workplace. You can also make a rough guess yourself, for example, the regulations will apply to you if the noise in your workplace is equivalent to a busy road, a vacuum cleaner or a crowded restaurant for most of the working day. Or if you have to raise your voice to talk to someone standing 2m away from you for part of the day. The regulations apply to most inherently noisy industries for example manufacturing, music, construction and anything using heavy machinery or power tools.

However, it is more accurate to measure the noise using a calibrated integrating sound level meter that meets at least Class 2 of BS EN 61672-1:2003. You will then need to calculate average employee exposure over an eight-hour working day to ascertain whether exposure is above the action values. The HSE provides guidance on how to do this; alternatively you could consult a competent noise assessor to carry out the noise measurements, calculate employee exposure and provide a full risk assessment.

**This guide is of a general nature; specific advice can be obtained from Assurity Consulting. Assurity Consulting is the UK's leading independent compliance consultancy specialising in workplace health, safety and environmental solutions. We have over 30 years' experience of helping customers of all sizes, from across all sectors, manage their compliance responsibilities, making sure that their organisation is compliant, their employees are safe, their processes are cost effective and their management team is in control.**



ISO 9001:FS 24510  
ISO 14001:EMS 84550  
BS OHSAS 18001: OHS 590676

### Assurity Consulting Limited

26 Redkln Way Horsham West Sussex RH13 5QH  
t +44 (0)1403 269375 e info@assurityconsulting.co.uk  
w assurityconsulting.co.uk

Registered in England and Wales Reg. No. 2227268  
Corporate Member of IWFWM