

## HEARING LOSS & PROTECTION

Hearing loss is a major problem in the UK...

More than  
**10 million**  
UK citizens suffer from  
hearing loss, that's  
**1 in 6**



From the total figure of 10 million

Around  
**6.4 million**  
are of retirement age (65+)



About  
**3.7 million**  
are of working age (16 – 64)



From 10 million, **more than 800,000** people are severely or profoundly deaf

And it's set to get worse...

**14.5 million**  
Will suffer hearing loss by 2031

The World Health Organisation predicts that by 2030 adult onset hearing loss will be in the top ten disease burdens in the UK, **above cataracts and diabetes.**



Noise induced hearing loss at work in the UK...

**2 million**  
Exposed above the **LOWER** exposure action value



**1 million**  
Exposed above the **UPPER** exposure action value



Noise-induced hearing loss is the second most common reason for occupational health-related employers' liability insurance claims\*.

**170,000**  
Suffer deafness, tinnitus or other ear conditions in the UK

**18,000**  
New cases of NIHL estimated annually in the UK.

**150**  
NEW claims awarded Industrial Injuries Disablement Benefit every year.

But it can be prevented...

### NOISE INDUCED HEARING LOSS (NIHL)

Is one of the biggest occupational health problems facing us today. Whilst NIHL is permanent and irreversible, it's also preventable. NIHL is a gradual process and when hearing damage occurs it is too late.

**100% PREVENTABLE**



NIHL is a long latency disease that is difficult to estimate accurately.



NIHL disease occurs mainly in men

Highest rates of NIHL occur in energy and extraction, construction and manufacturing industries

### NIHL FACTS

- Takes time to develop
- Causes no pain, visible trauma or scars
- Is unnoticeable in its infancy stage
- Accumulates with every over exposure
- Is permanent and 100% preventable



## Noise Action Levels

Loud noise is an occasional part of everyday life. Permanent hearing damage results when the noise is too high, for too long, too often. The risk from noise at work is indicated by the daily personal noise exposure level or L<sub>EP,d</sub>. This is the total noise dose in the working day. This may be made up of periods at different sound levels but it is expressed as the equivalent steady level that would give the same dose in eight hours.

The Control of Noise at Work Regulations give action and limit values for the above risks which are trigger points for action to protect employees. The action values take no account of hearing protection use, but the limit values do take account of the attenuation of any hearing protection used.

It's also worth noting that every 3dB of noise doubles the risk due to the way noise is measured using a logarithmic scale.

### Actions required when the action values are exceeded

#### Actions when at and above the lower action value

- Make a noise risk assessment.
- Provide staff training on the risks and how to keep safe.
- Implement controls to reduce the level and duration of exposures.
- Consult with staff on workplace changes.
- Make hearing protection available.

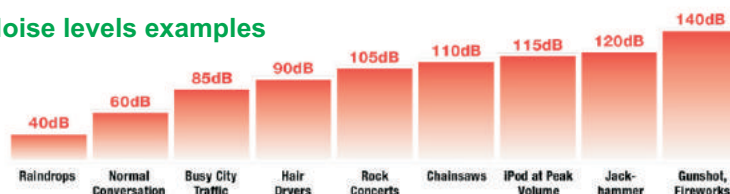
#### Actions when at and above the upper action value

- Produce an action plan of control measures that details the how, when and who is responsible.
- Mark out areas where exposures are likely to exceed the upper action values as hearing protection zones. Hearing protection must be worn in these zones.
- Provide regular health surveillance to employees at risk (this would usually include everyone regularly exposed above the upper action value).

|                    | Daily personal noise exposure level L <sub>EP,d</sub> dBA | C-weighted peak level L <sub>Cpeak</sub> dBA |
|--------------------|---|--|
| Lower action value | 80  | 135  |
| Upper action value | 85  | 137  |
| Limit value        | 87  | 140  |

Avoid reducing below 70dB

### Noise levels examples



## Risk Management

If noise is becoming a problem, as part of your legal obligation you will need to complete a noise risk assessment to remove, reduce or control the exposure.

We can help you achieve and maintain full health, safety and environmental compliance. With our breadth of knowledge, industrial and technical experience plus a sensible risk management approach they provide realistic and practical solutions to resolve problematic issues with clear and simple advice.

### Ear Defenders

Ear defenders fit over and surround the ears with a cushioned seal. The inner surface of the cups provides the hearing protection with a sound absorbing material.

### Ear Plugs

Ear plugs fit into the ear or cover the ear canal to form a seal. Ear plugs are suited for use with safety glasses and other forms of personal protective equipment where compatibility may be an issue

### Noise Measurement

Measuring noise levels in the workplace to ensure employees noise exposure is kept to a minimum is an important part of any hearing conservation programme. Noise measurement helps to identify areas where noise is a problem and employees who may be affected. It also helps to ensure the protection levels are maintained, we recommend this is monitored regularly to make sure you are compliant with the Noise at Work Regulations 2005.

### Communication Solutions

Working in high noise environments can make communicating with others more difficult, prompting the need for the person to either completely remove their ear defender or to lift a cup of the defender to hold a conversation with someone.

For some, this may not seem to be an issue, however the overall impact of this action could in fact reduce the effectiveness of the hearing protection during the working day.

