

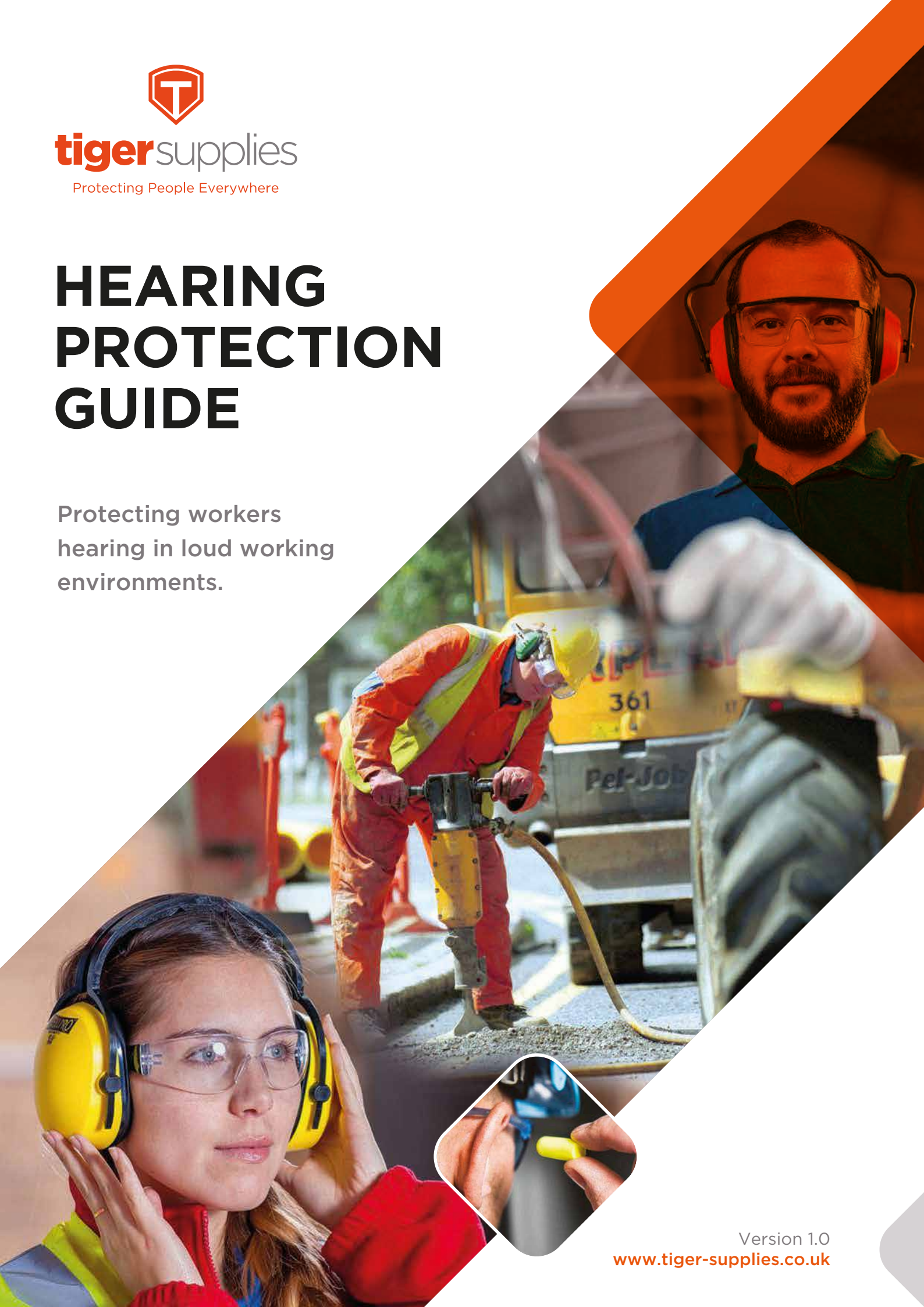


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Protecting People Everywhere

HEARING PROTECTION GUIDE

Protecting workers hearing in loud working environments.





When should hearing protection be used?

There are
an estimated
17,000
workers with
work-related
hearing problems
(2017-2020)



Hearing protection should be issued to employees:

- where extra protection is needed above what has been achieved using noise control;
- as a short-term measure while other methods of controlling noise are being developed.

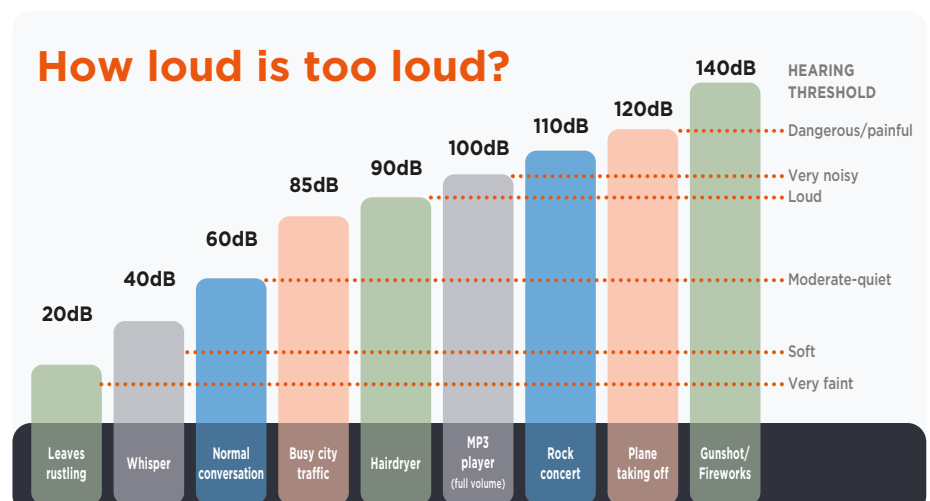
Employers are required to:

- provide employees with hearing protectors if they ask for it and their noise exposure is between the lower and upper exposure action values;
- provide employees with hearing protectors and make sure they use them properly when their noise exposure exceeds the upper exposure action values;
- identify hearing protection zones, i.e. areas where the use of hearing protection is compulsory, and mark them with signs;
- provide employees with training and information on how to use and care for the hearing protectors;
- ensure that the hearing protectors are properly used and maintained.

Examples of common decibel levels

Research suggests that the safe exposure limit for noise is **85 decibels for 8 hours a day**.

Beyond this, a workers hearing could be at risk of damage.





How to measure a working environments noise level in decibels

There were **95 new cases** of occupational deafness in 2019, almost double the previous year



Sound measures can be purchased with a meter which are designed to measure the intensity of sound, which we've already established as a "decibel" (dB). A sound measure generally has a digital display showing a decibel range and resolution to approximate to the ear's dynamic range, usually the upper range rather than the quiet part. This process is important to establish the levels of sound your workers are exposed to.

When does noise exposure become dangerous?

Once a noise level reaches above 85dB, hearing damage may begin.

Noise Levels

Once noise levels reaches over 85dB (approximately the level of a vacuum), damage to your hearing may begin.

After this, every 3dB increase in sound halves the length of time that your ears can handle the noise before damage starts.

You can only listen to personal music players (PMPs) for approximately 3.75 minutes on a high volume before it starts to damage your hearing.

The lower the volume, the longer you can safely listen for.

	Decibel Level <small>(Unit of sound measurement)</small>	How long can you listen without protection?	Noise source
Danger	130	0	Jet take off
	120	0	Music concert
Hearing Protection Needed	115	Less than 1 minute	Sports event
	109	Less than 2 minutes	Car horn
	106	3.75 minutes	Personal music player at maximum volume
	103	7.5 minutes	Belt sander
	100	15 minutes	School dance, machinery
	97	30 minutes	Motorcycle
	94	1 hour	Electric drill
	91	2 hours	Shouting, lawn mower
Level at which damage begins			
Safe	55	8 hours	Vacuum cleaner
	55	Safe	Conversation



What level of ear protection is required to protect workers?

Hearing protection products like Ear Defenders and Ear Plugs are generally measured by a value called an “SNR” (Single Number Rating). The SNR rating of a hearing protection product is designed to reduce the decibel exposure by that number to a safe decibel range.

For example, if a worker is exposed to a working environment with an average exposure of 90 dB, the ideal hearing protection product would be 15-20 SNR.

90db - 20 SNR = **70dB**

70dB - 85dB is considered a safe range, but workers and employers should be mindful to not over-protect which has it's own hazards; reducing the noise exposure to less than 70dB with hearing protection may cause issues with communication and hearing other warning signals.

A-weighted noise level (dB)	Select a protector with an SNR of...
85-90	20 or less
90-95	20-30
95-100	25-35
100-105	30 or more

Getting regular hearing checks

Never underestimate the importance of occupational hearing tests to ensure that workers are not sustaining irreparable damage to their hearing, with life-changing consequences for them and potential legal ramifications for the employer.

Be sure to schedule hearing screening programs at regular intervals as instructed by the HSE.

TIGER SUPPLIES HEARING PROTECTION PRODUCTS

Check out our range of hearing protection products on www.tiger-supplies.co.uk

