

The new BOHS noise template

Paul Delderfield

Principal Specialist Inspector (Noise & Vibration)

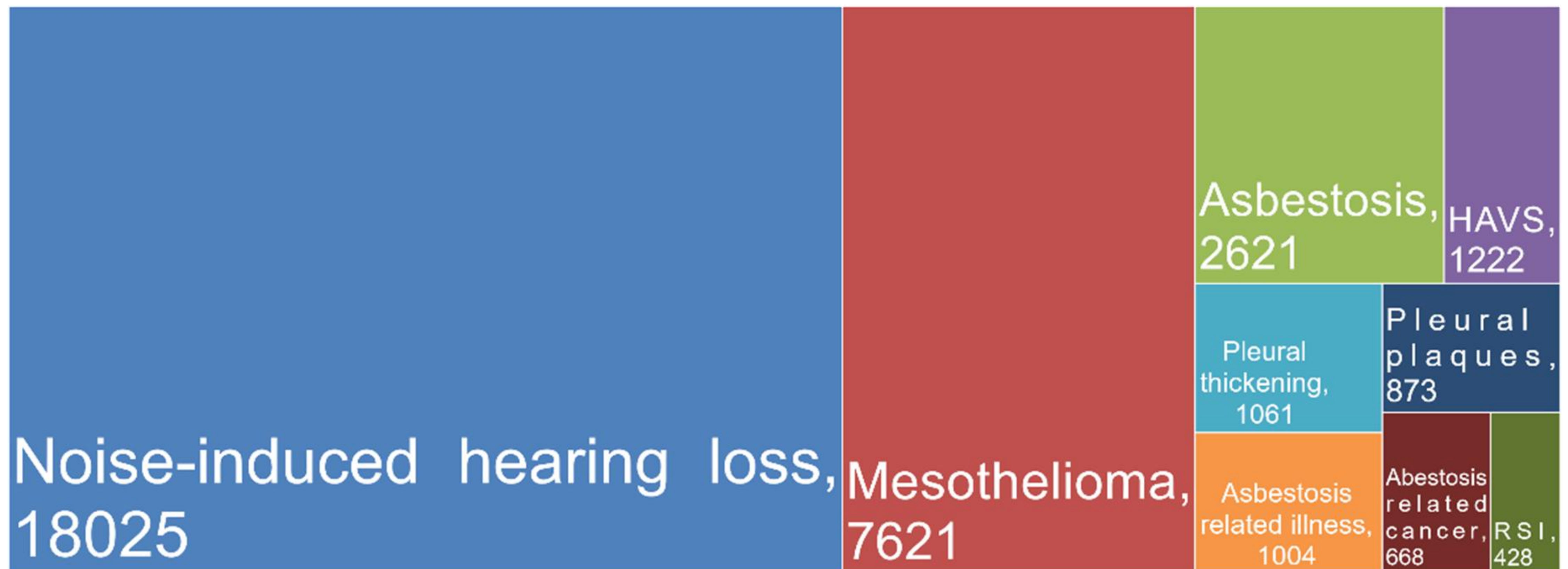
What's the problem?

- Noise Induced Hearing Loss (NIHL)
- Other related health issues (Stress, Dementia, Heart disease....)
- Prejudice:
 - Hearing loss only affects old people
- Quality of life:
 - Increases the risks to mental health
 - Impact on social functioning
- Safety issues:
 - Ability to hear communications and alarms



Do we still have a problem?

- Employer liability insurance claims



What have employers been doing about it?



- **It's not working!**
- The implication of continuing high incidence of NIHL is that the current hearing protection and health surveillance programmes are not working effectively to prevent hearing loss

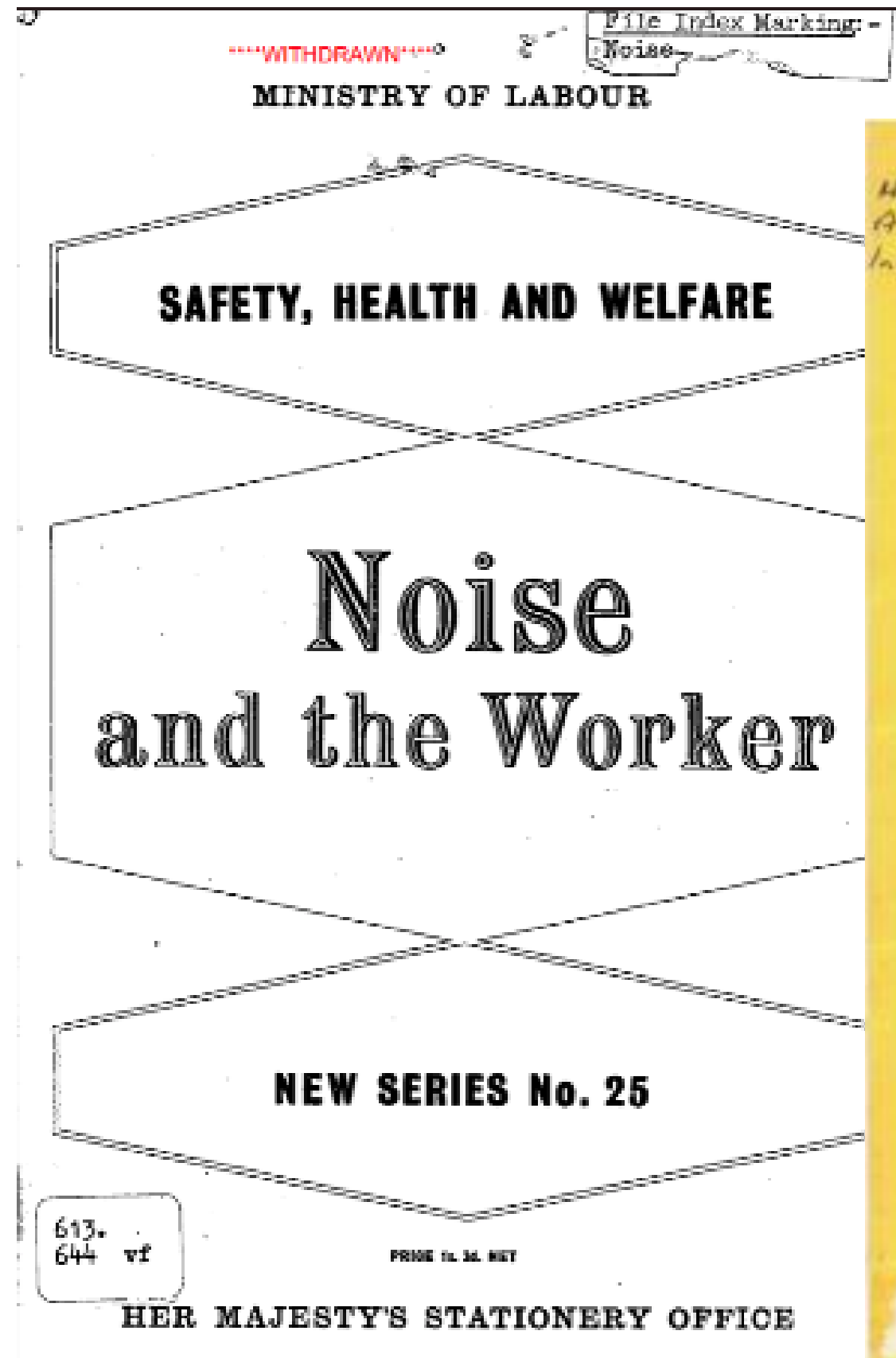


Is there a role for hearing protection?

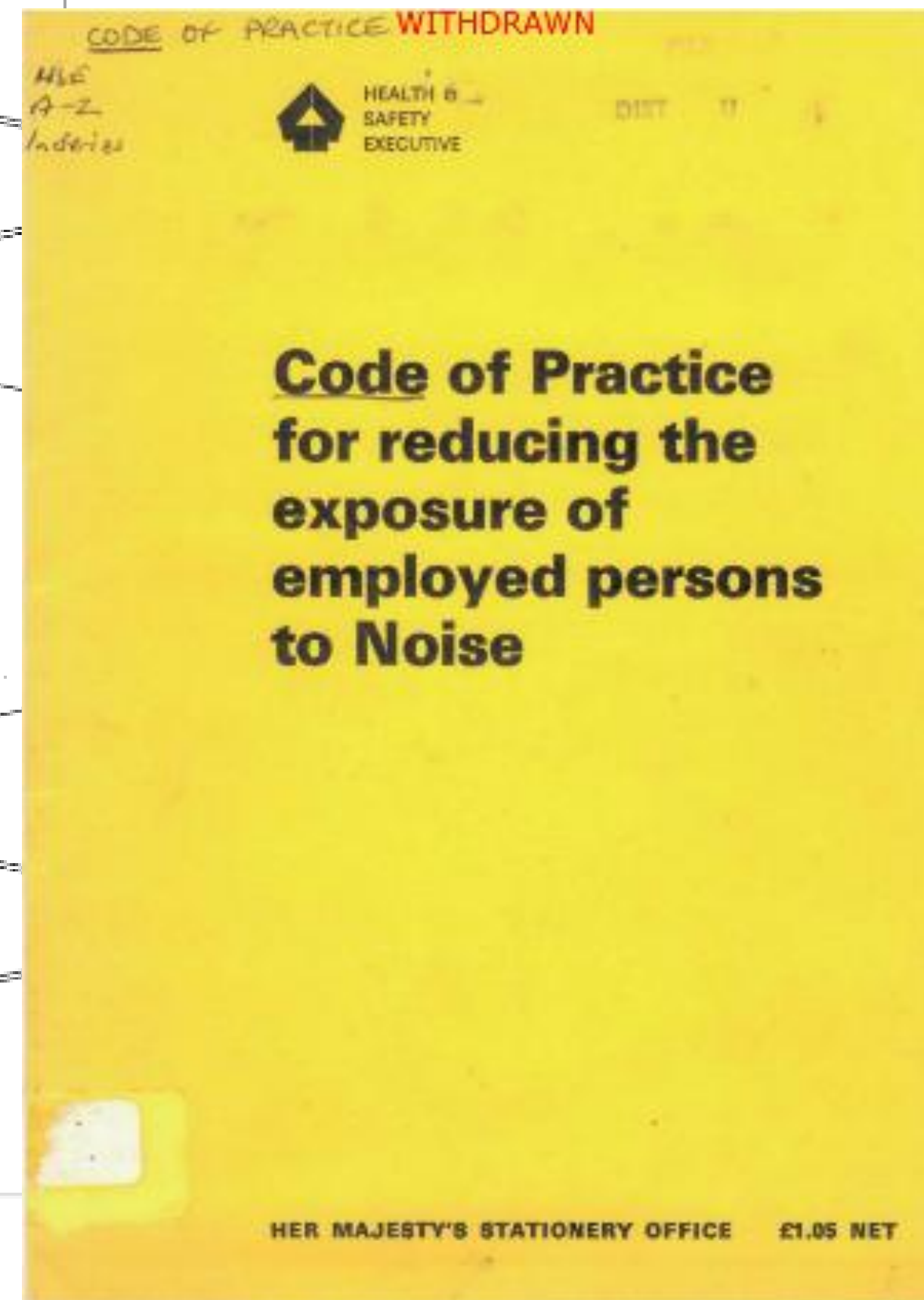
- Not all noise issues can be fully controlled at source
- Hearing protection can be used to protect against the residual risk or as an interim measure
- Hearing protection is the last line of defence in preventing NIHL

Is this a new initiative?

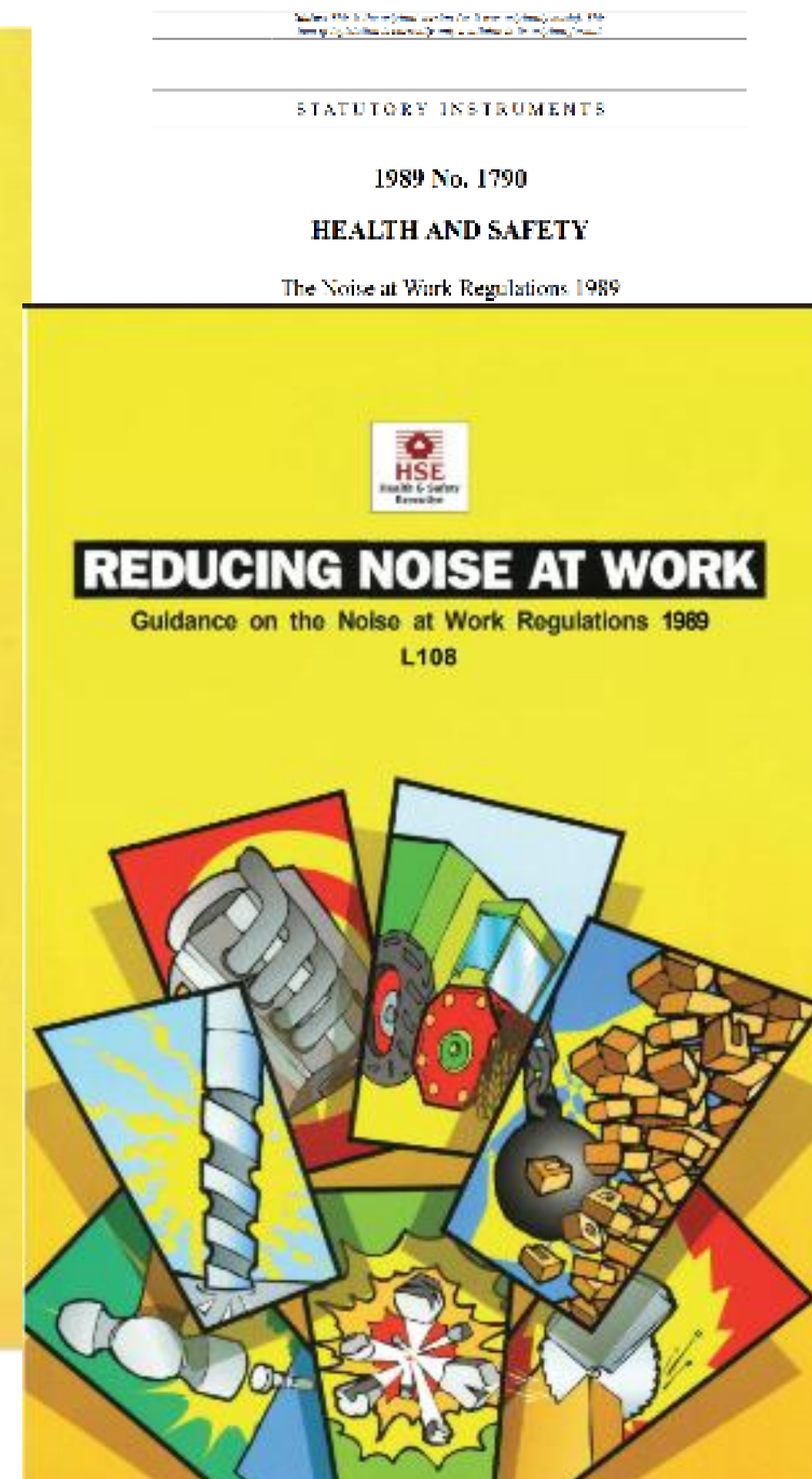
DIOGELU POBL A LLEOEDD PROTECTING PEOPLE AND PLACES



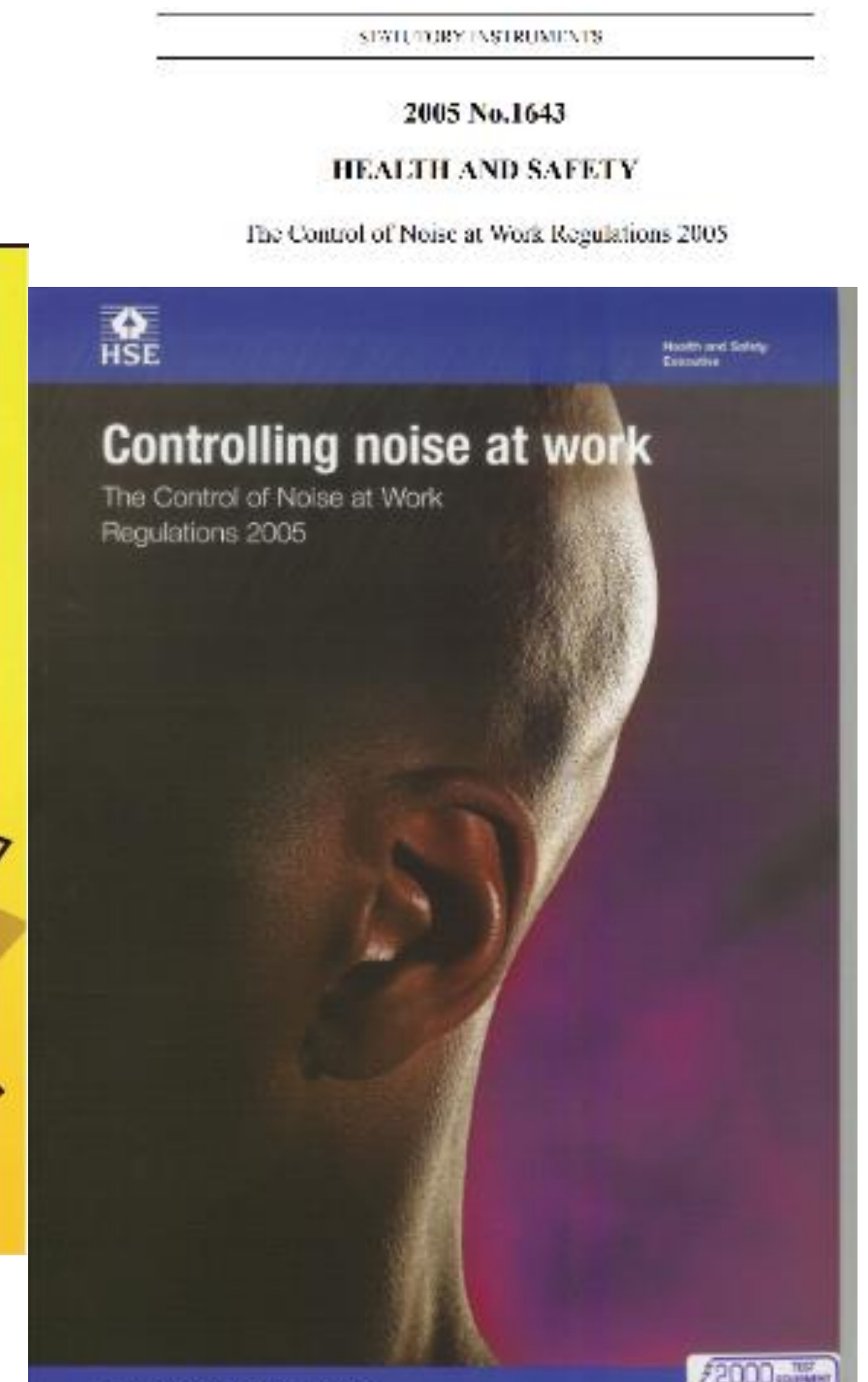
1963 guidance



1972 COP

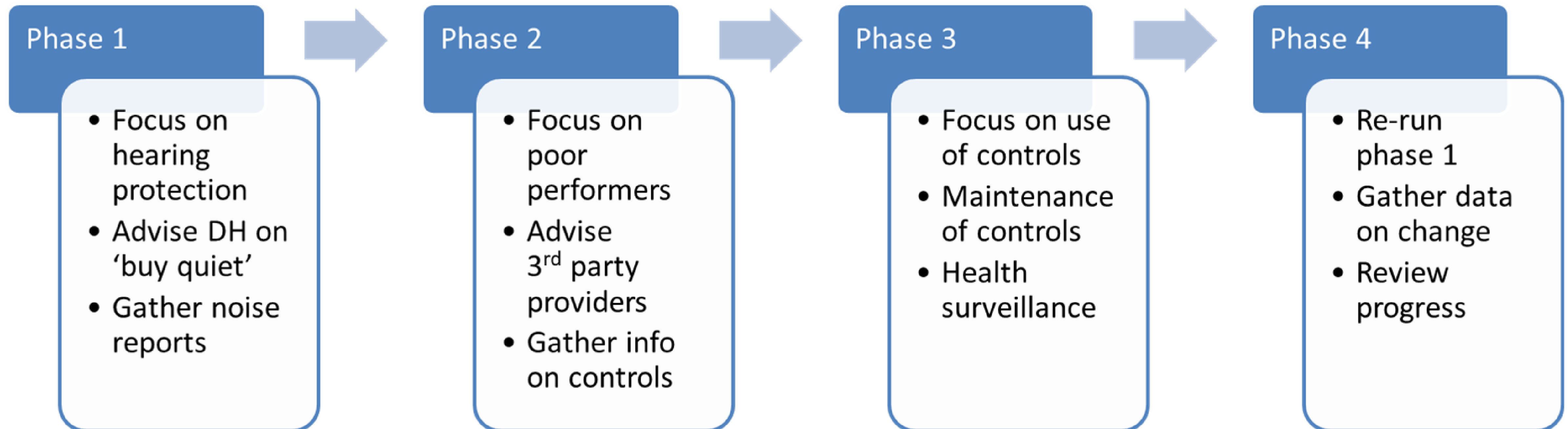


1989 regulations
and 1998
guidance



2005 regulations and 2nd edition guidance
3rd edition 2021

HSE's strategic objectives 2022 – 2032 include reducing work-related ill-health in GB:
Focus on regulating exposure to health hazards in workplaces – including noise



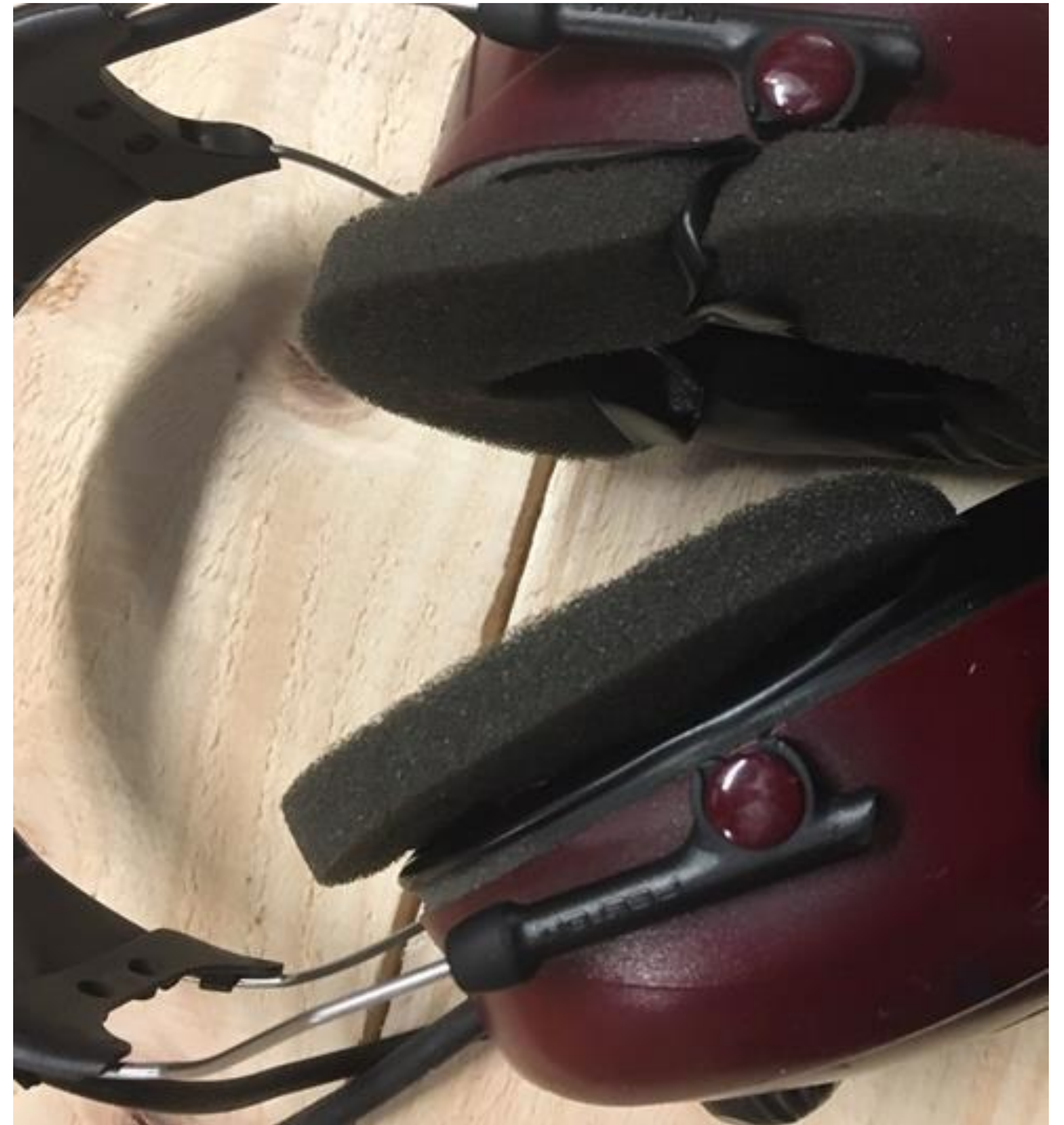
Focus on hearing protection

- C - Condition
- U – Use
- F – Fit the ear
- F – Fit for purpose

Condition

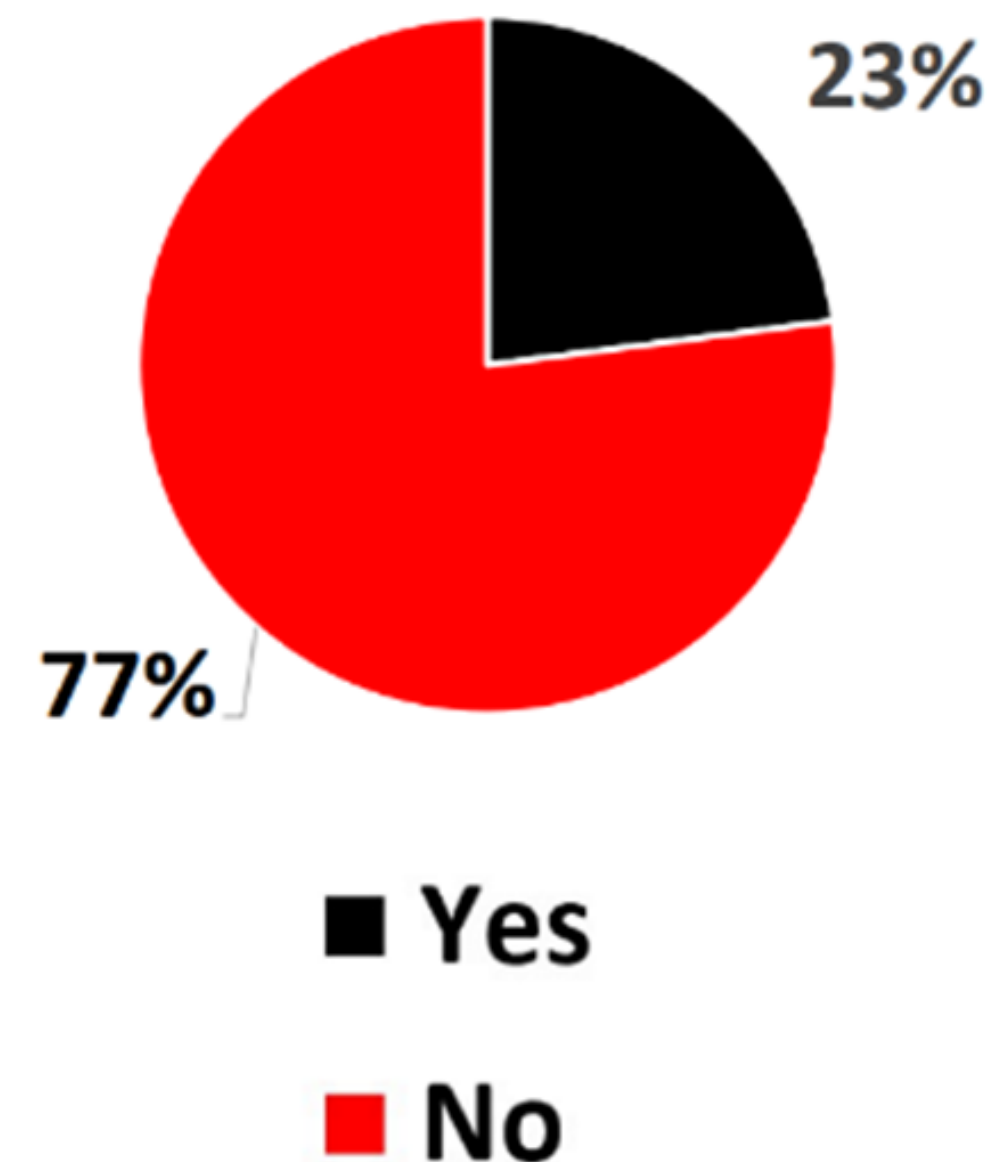


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PROTECTING PEOPLE AND PLACES

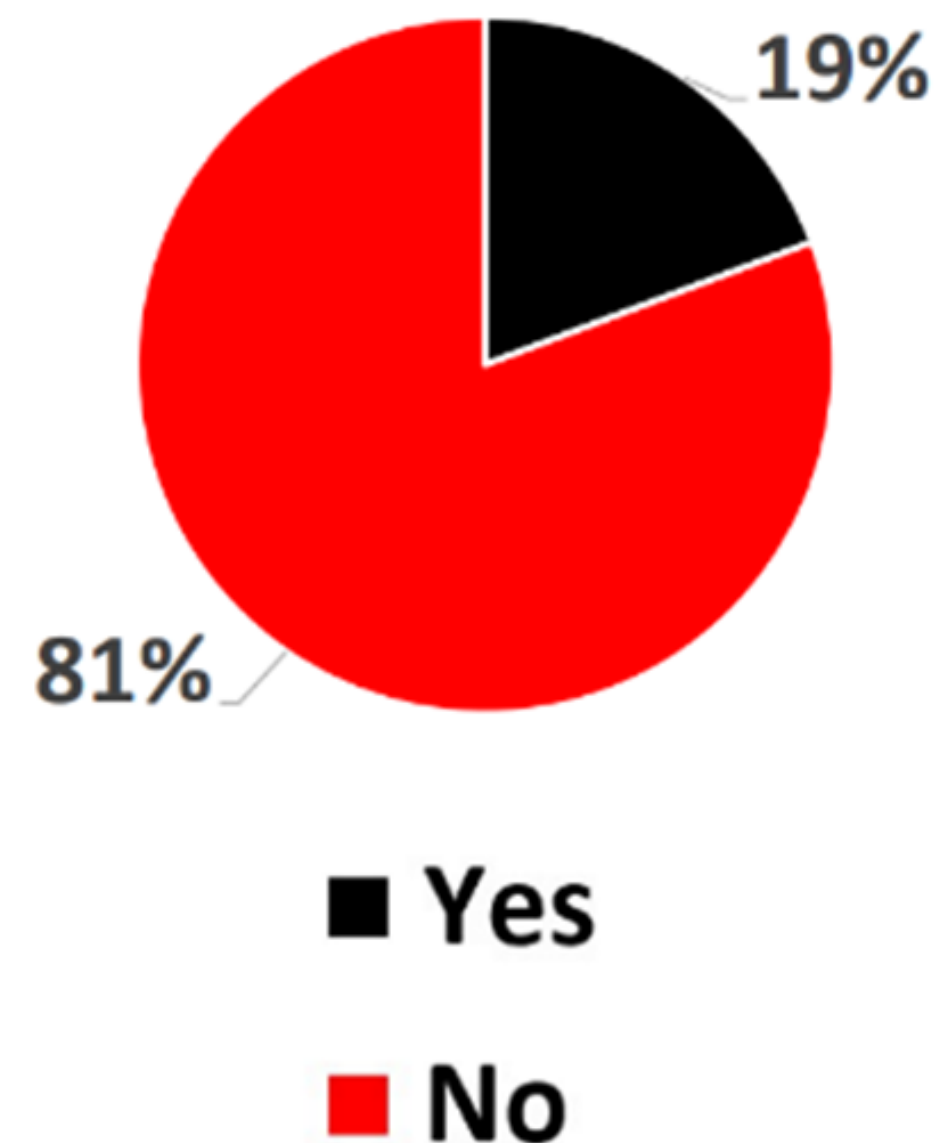


Care of hearing protection. Were you shown:

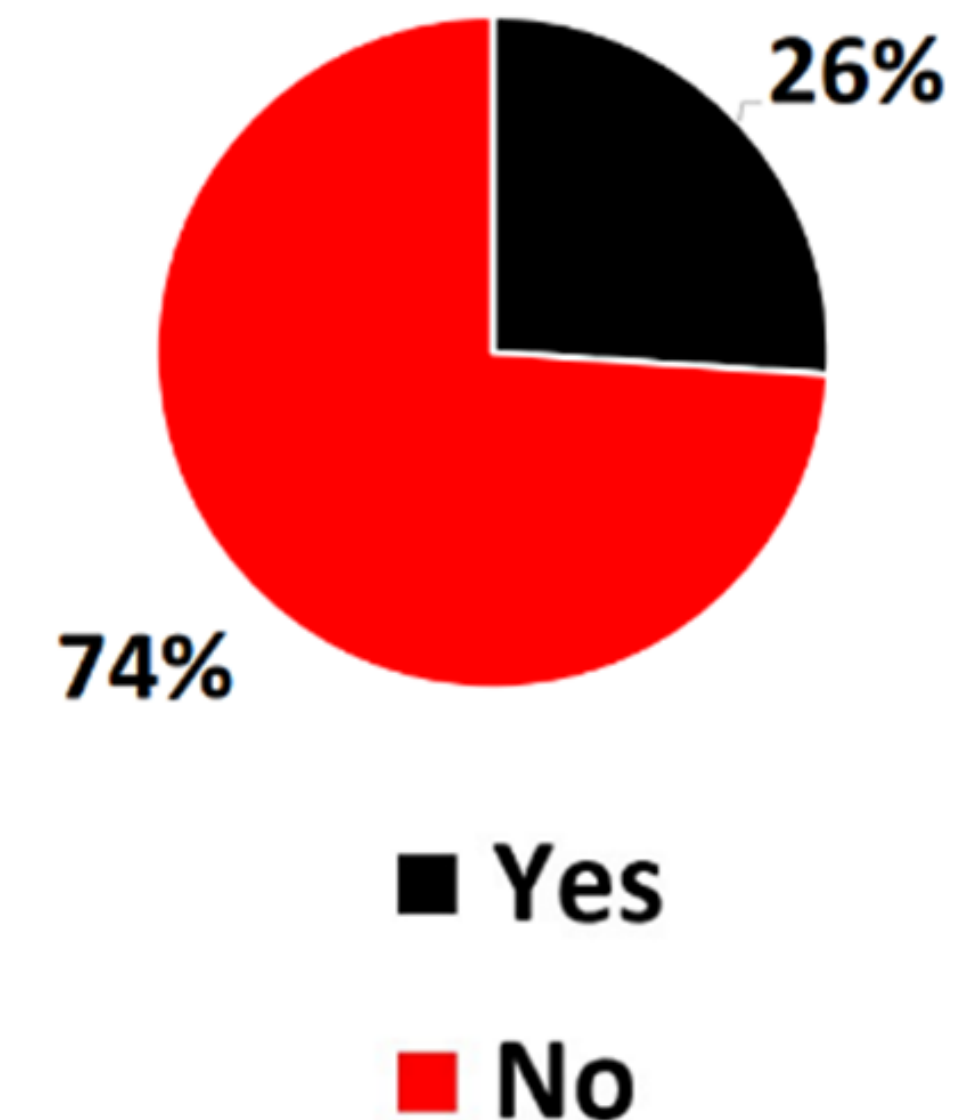
How to store?



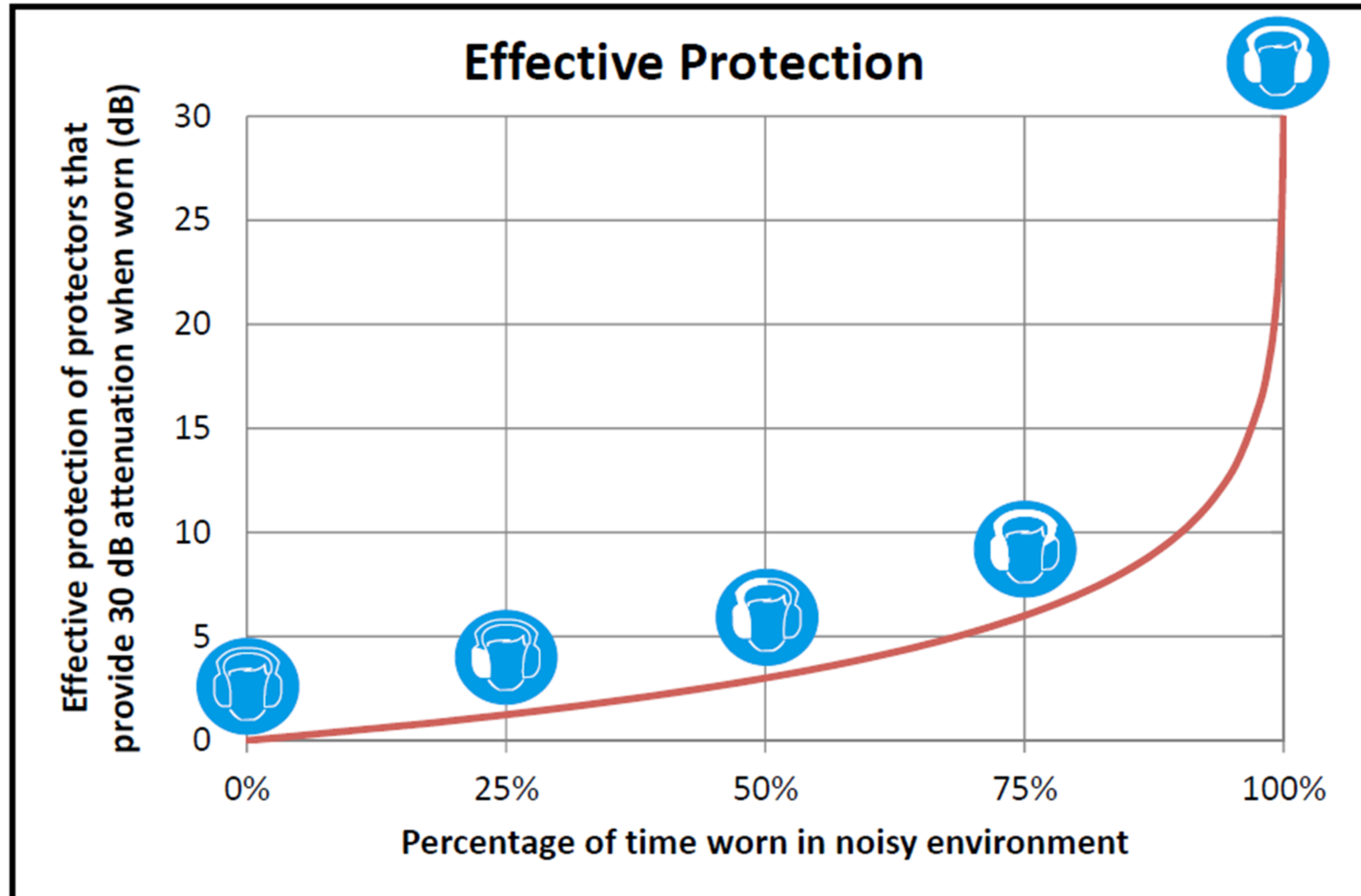
How to check?



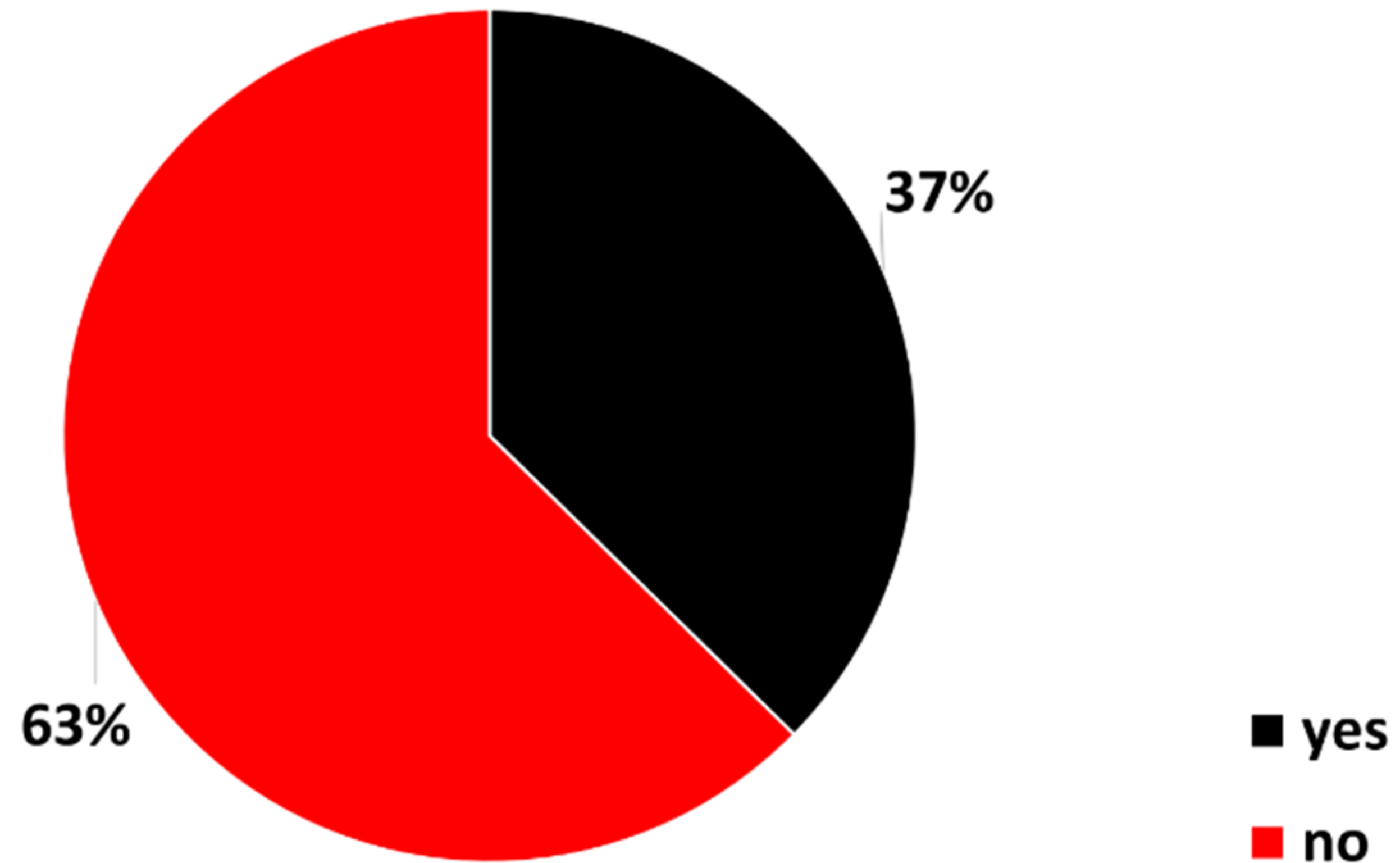
How to report damage?



Use



Were you told how important it is to wear HPE all the time you are working in noise?



Fit the ear



Figure 28 The problems of fitting muff-type ear protectors (eg with long hair, safety glasses or jewellery)

HSE in the 1990s



Figure 17 Correct fitting of earplugs



Figure 18 Incorrect fitting of earplugs

HSE in the 2020s



Figure 19 Problems of fitting earmuffs with long hair

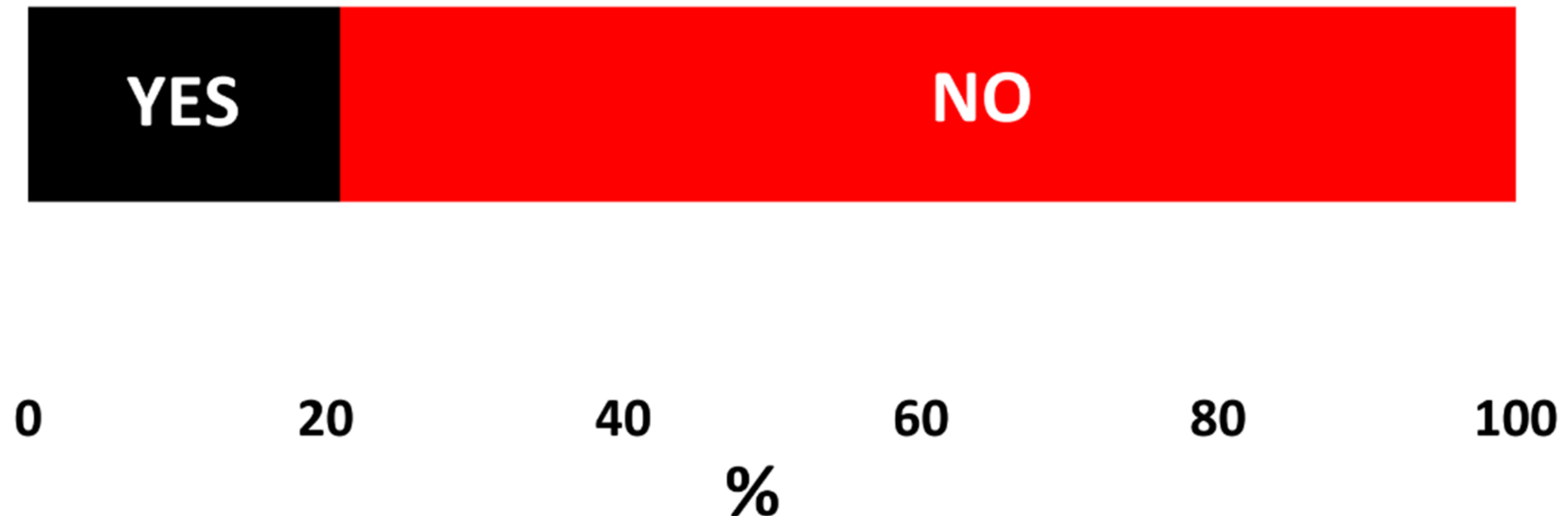


Figure 20 Problems of fitting earmuffs with jewellery



Figure 21 Problems of fitting earmuffs with safety glasses

Did you get training on how to wear HPE with other PPE?



Fit for purpose

Noise level dB(A)	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



27



28



31



35

Attachments
To fit most users needs, the headset is available in both headband and helmet attachment. All in black colour.

Dual shell design
To protect the electronics from sweat inside the cup, all electronics are placed on the outside beneath the shell.

Large user-friendly push buttons
To adjust volume and turn the product on/off.

3.5 mm jack
A listen-only stereo input to connect to a cell-phone, radio, two-way radio or other external devices (limited to 82 dB).



Stainless Steel Wire Headband
Wire headband offers comfortable and consistent pressure.

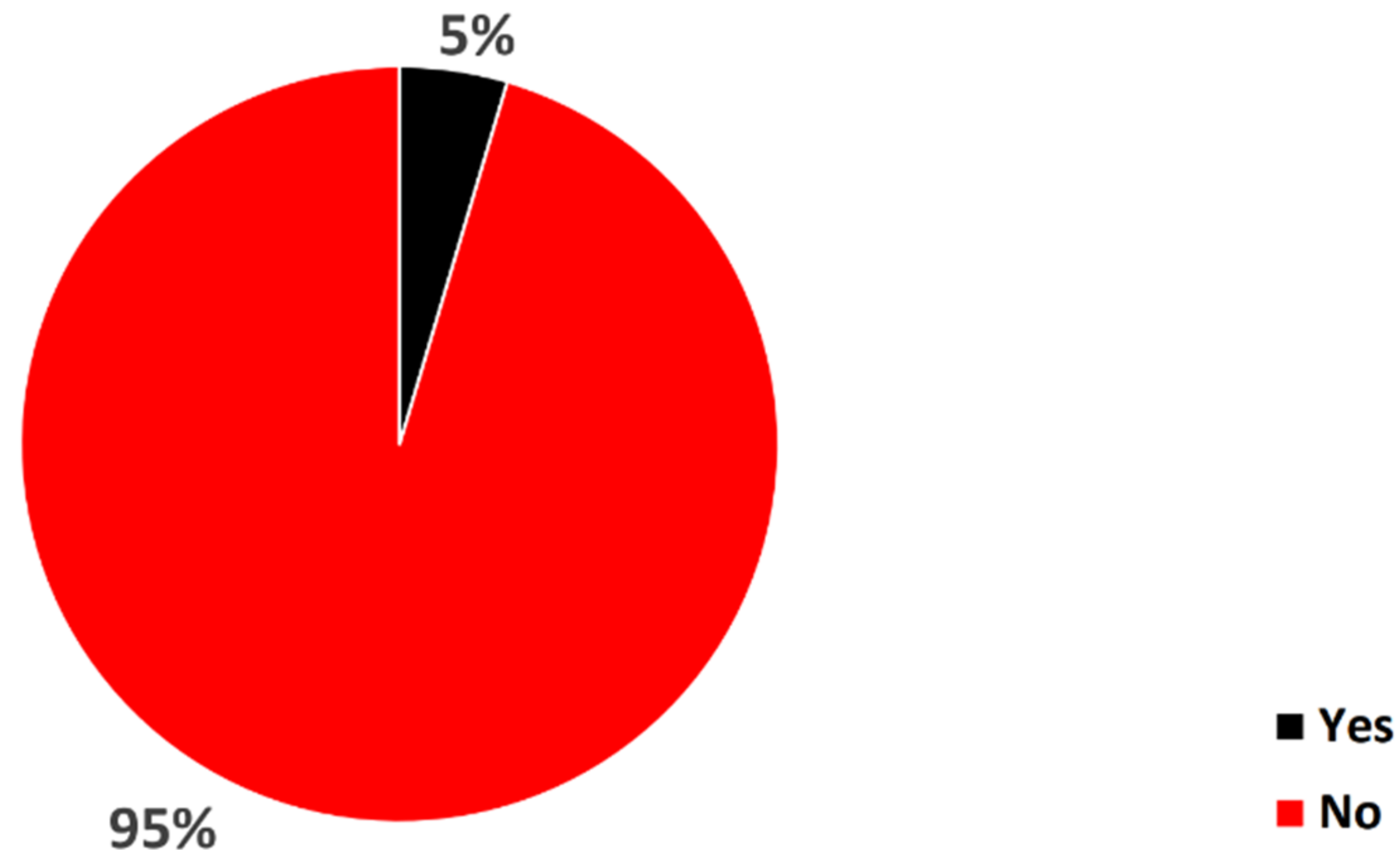
Hearing Protection
Noise attenuating ear cups help provide hearing protection in environments with potentially hazardous noise.

2xAA batteries
Lasting for approx. 100 hours of use. The headset will turn off after 4 hrs of non-use to save batteries. A message will be heard when the battery is low.

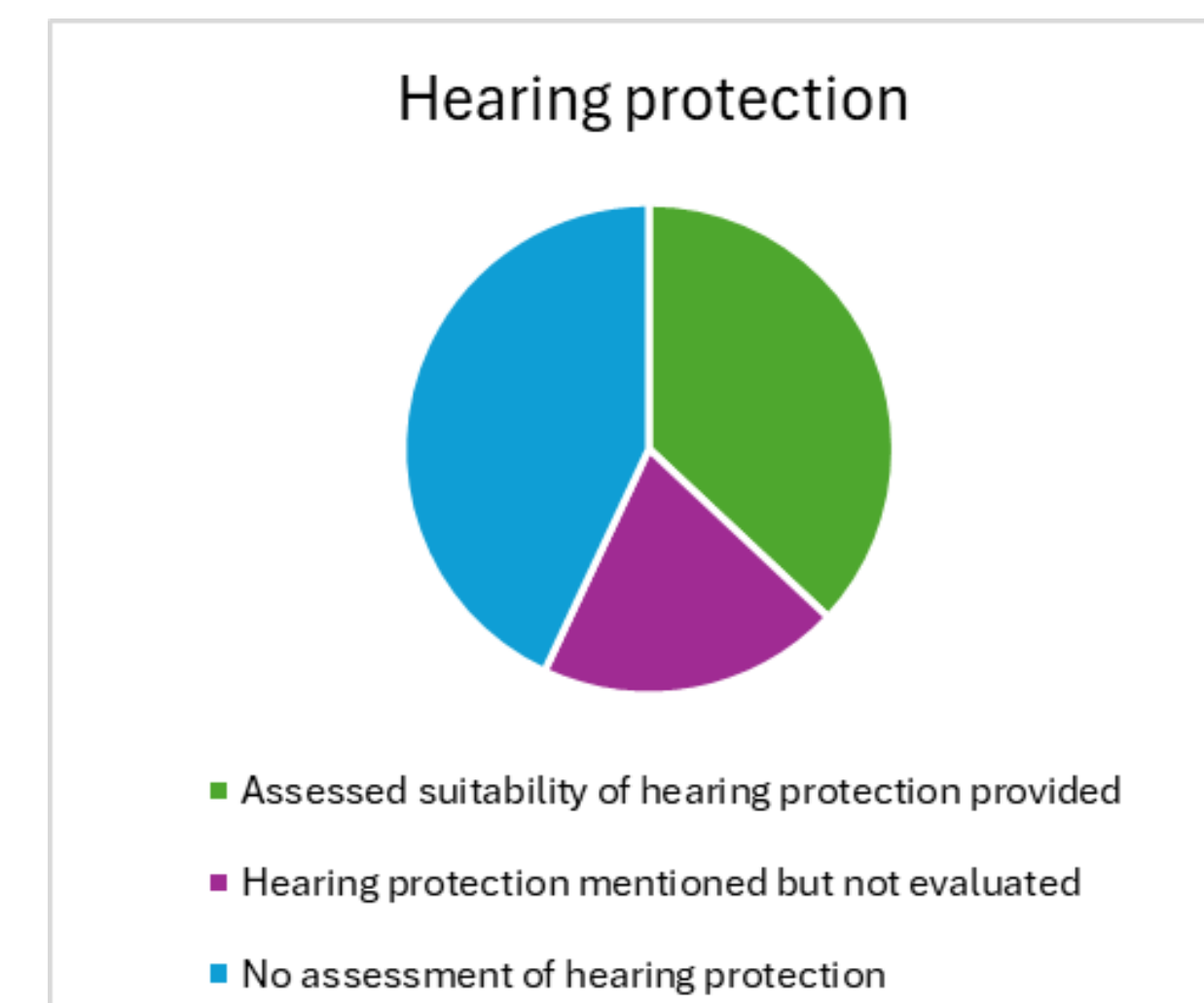
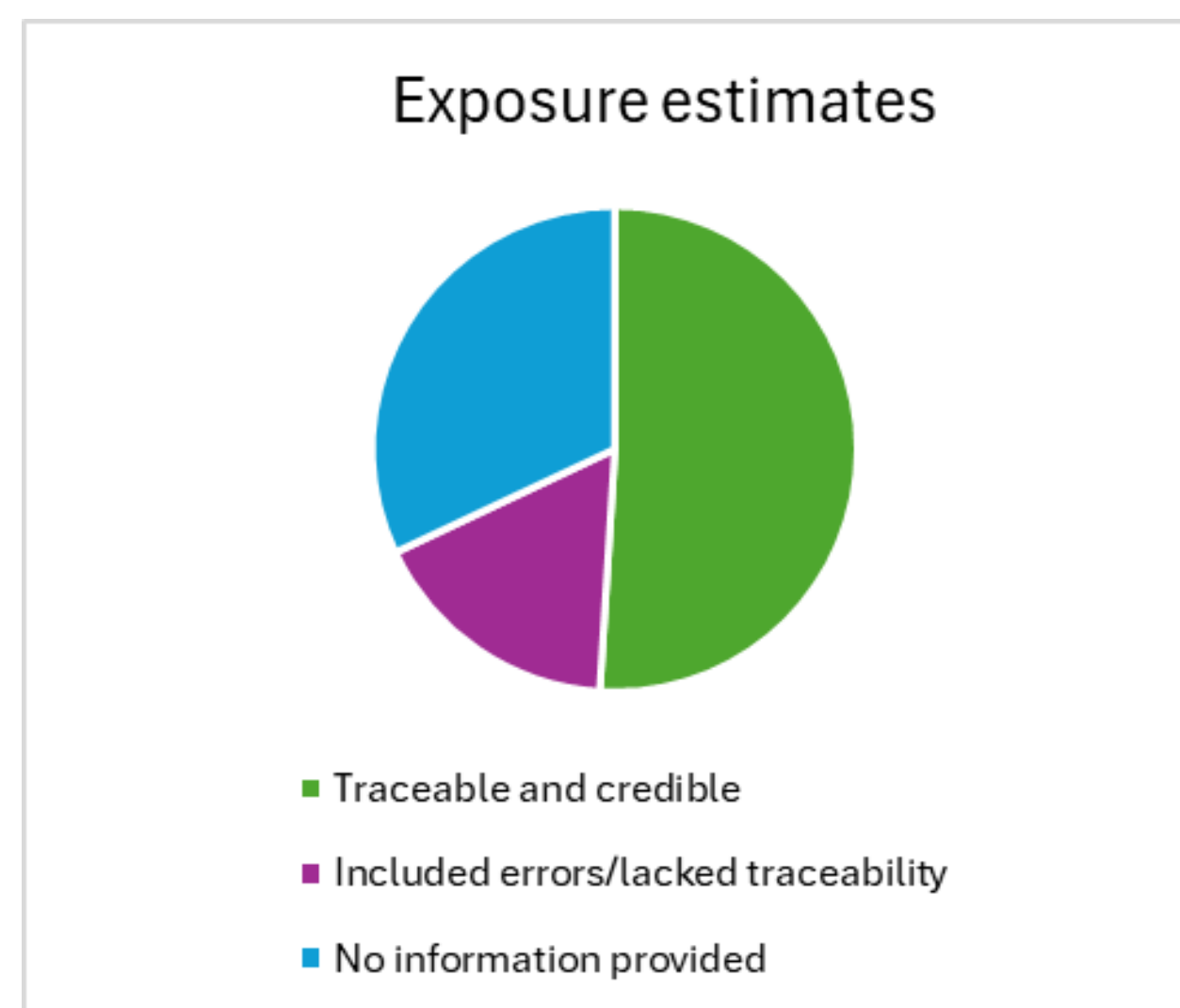
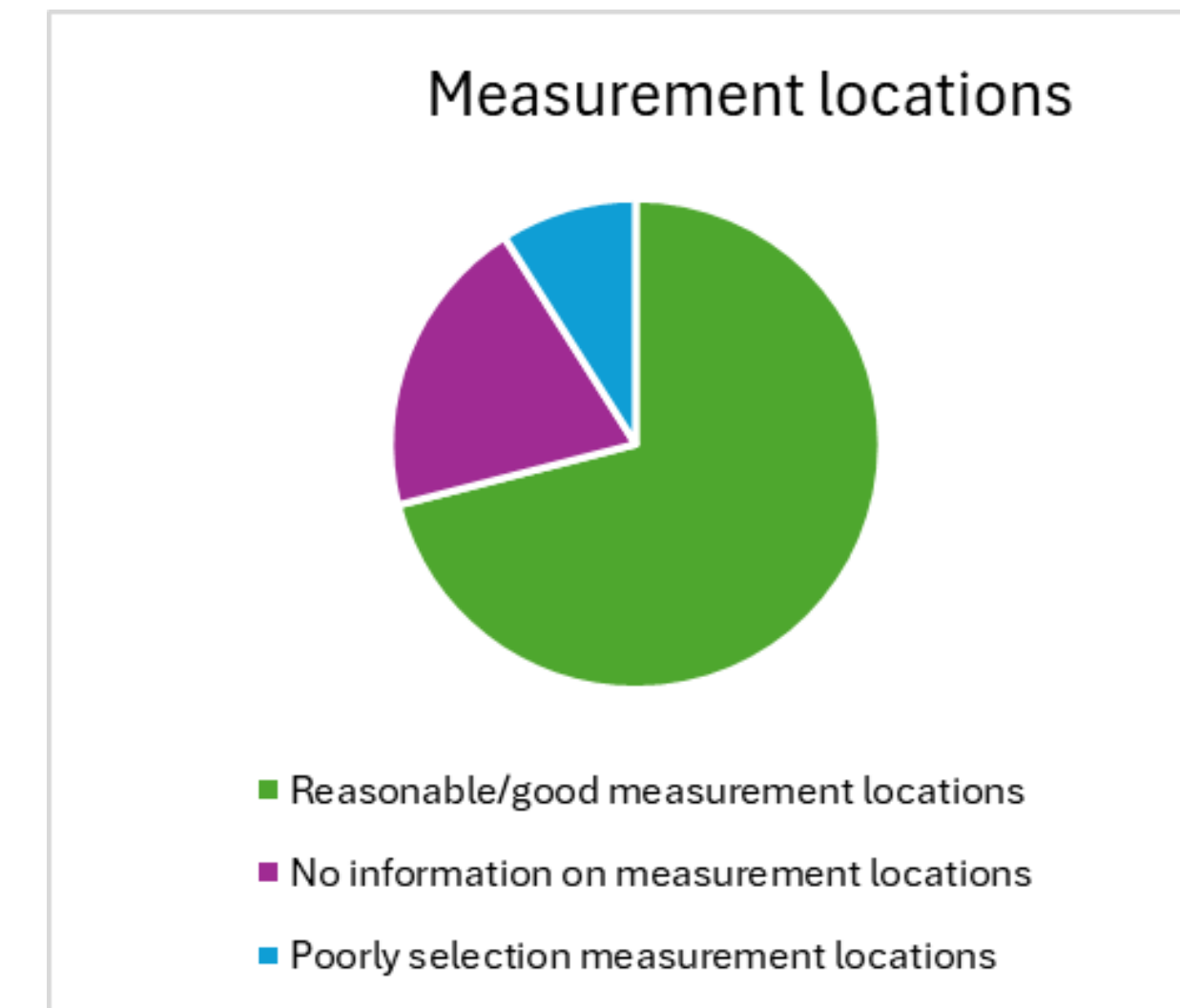
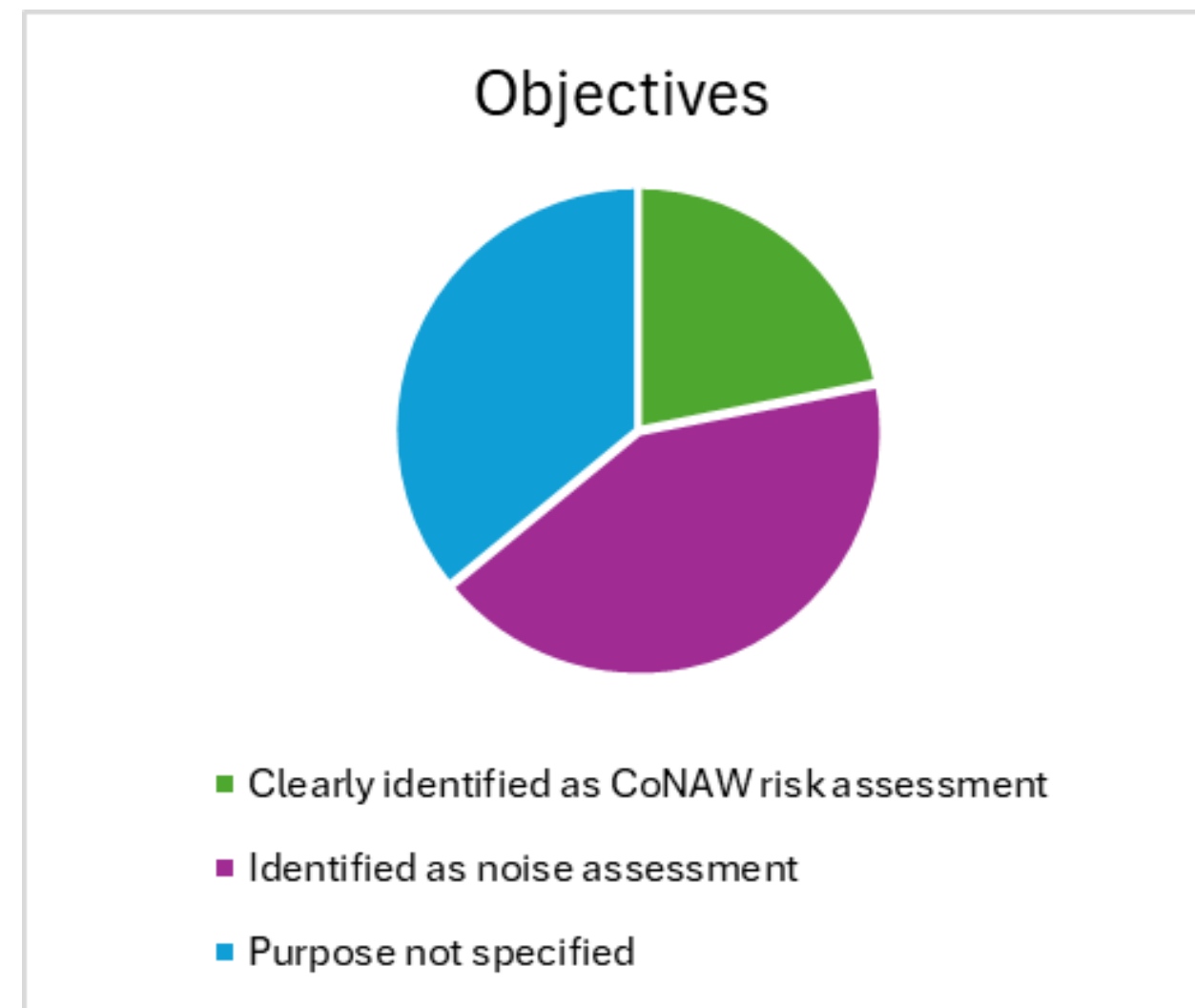
Replaceable cushions and foam liners (hygiene kit)

Level-dependent Microphones
The digital level dependent function for ambient listening is set with five incremental steps.

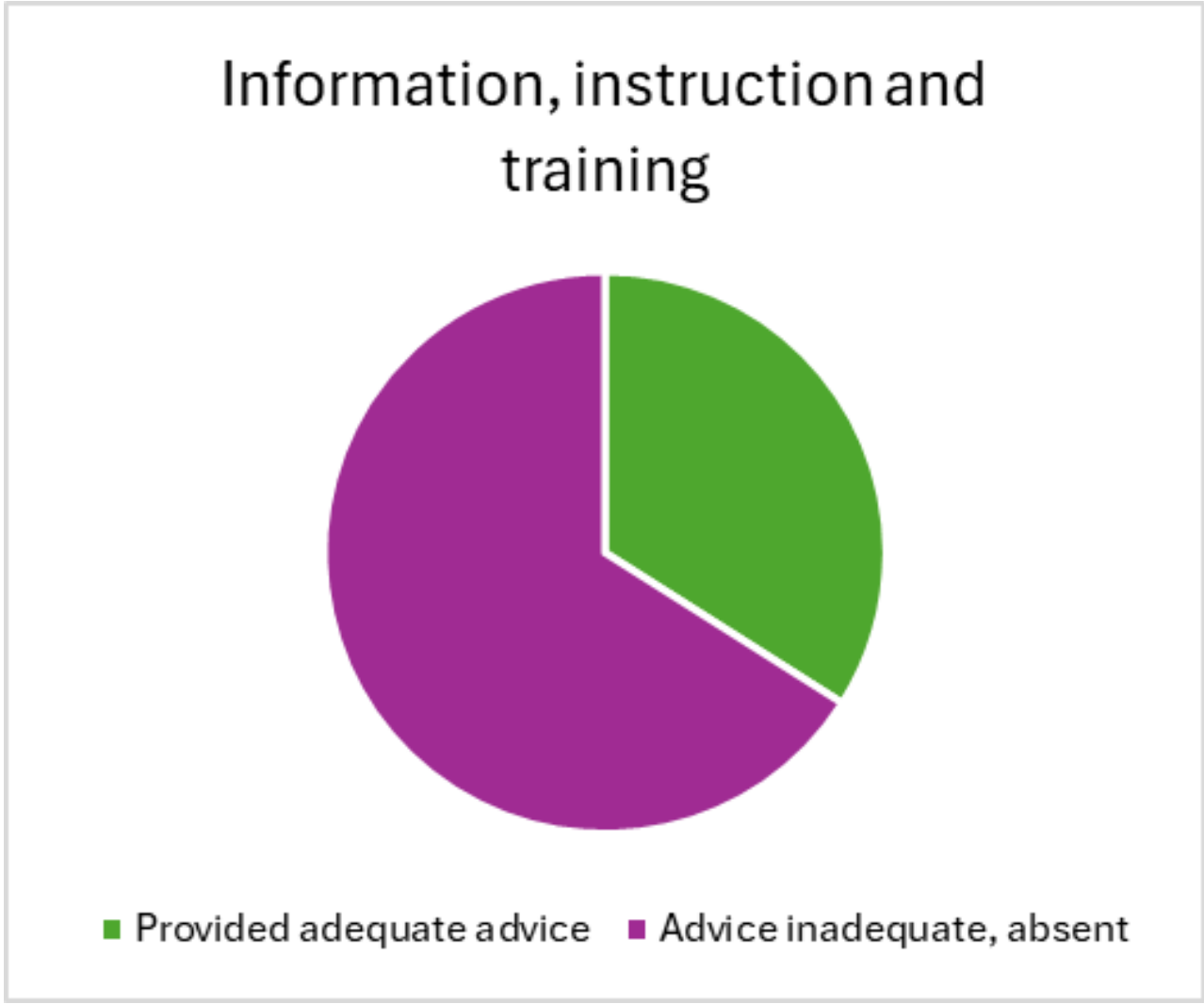
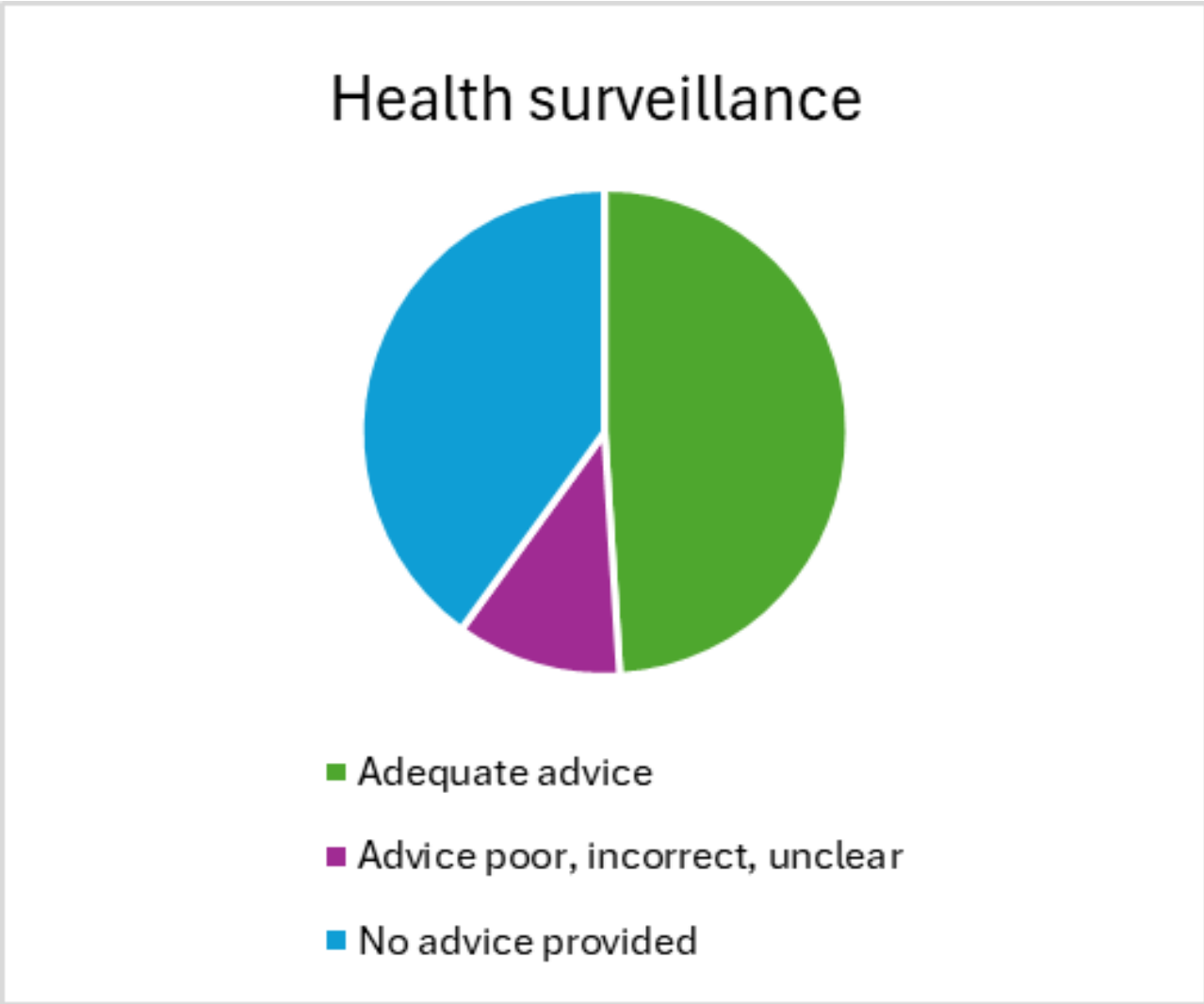
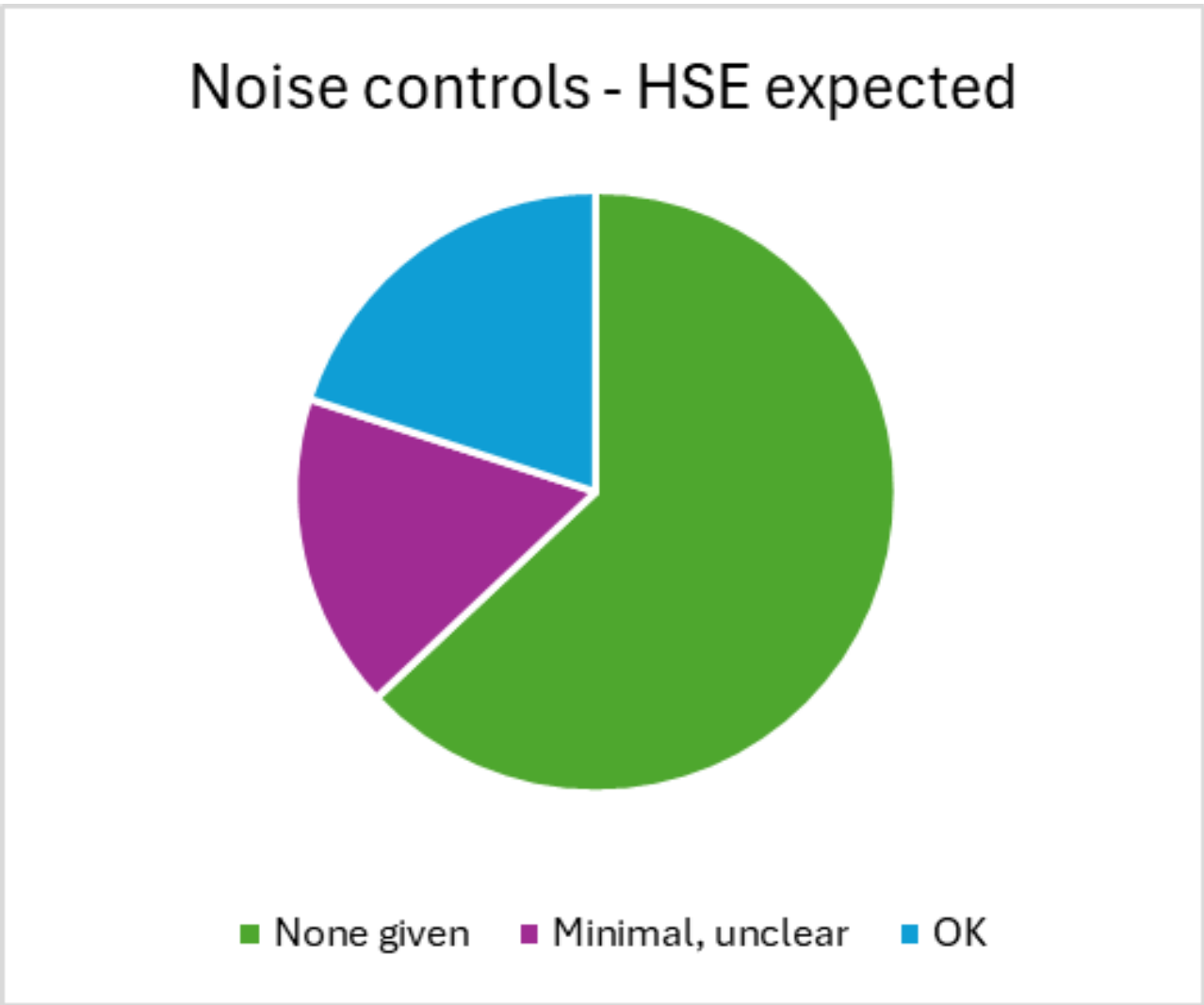
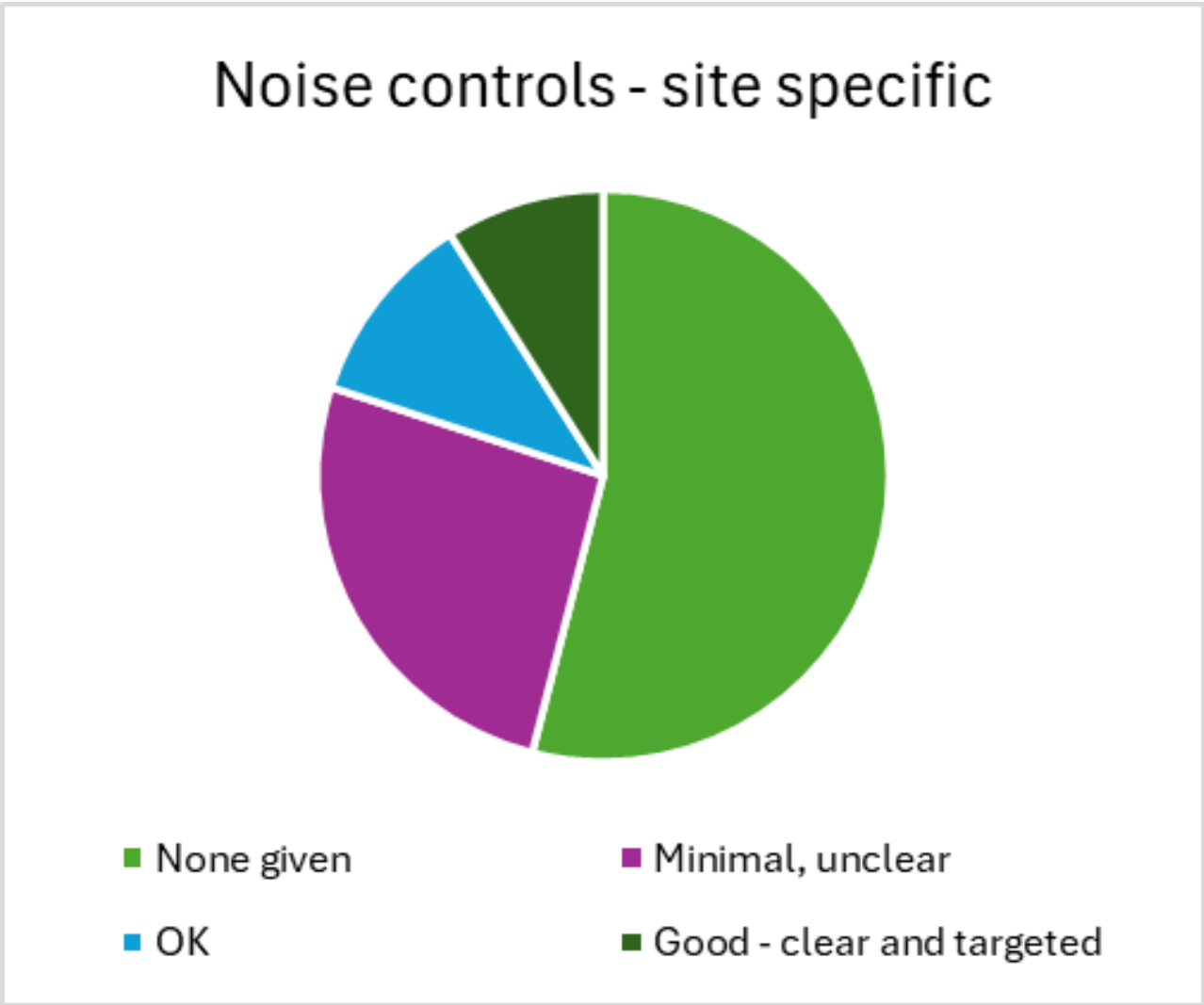
Are employers checking audibility when they issue workers with hearing protection?



Review of consultants' reports - results



Review of consultants' reports - results





FEATURE



Regulator cracks down on rogue consultants

By Dr R M van Besouw, HM Specialist Inspector of Health and Safety (Noise and Vibration)

Content warning: The following story is fictional but contains examples of failings taken from real reports that may be disturbing to the readership of Acoustics Bulletin.

Barry Bumbler, BSc, SSC, packed his ACME 500 high precision decibel meter and his ZP-3 Professional digital noise meter into his rucksack, with his phone, a note pad and a Thermos. The ACME 500 was his favourite. He had got it for a bargain £18.95 online where it had an average customer review of 4.9 stars. Mr E. Fudd had given it five stars, affirming that it 'Works as advertised. I have no way to check the calibration, but seems close enough for the money'.

It had a large colour screen, a button to flip between A- and C-weighted measurements and a pause button. The ZP-3 Professional had been reduced from £45.40 down to £26.33 and he could see why. It didn't have a colour display, he had not been able to decipher from the manual what all the symbols meant and the foam ball kept falling off, but at least he could make recordings with it.

The job today was a workplace noise assessment at Wile E Woods Ltd on the Isle of Wight, a joinery site just outside of Ryde that would earn Barry £450. He had agreed with the Managing Director to turn up at 10.30 and mentioned that, allowing for a 45-minute lunch break at Tony's Fish & Chip Shop, he could be away on the 13.00 ferry and save a few quid with a server ticket.

On arrival of Wile E Woods it turned out that the MD was working from home on the mainland. The

Operations Manager, Steve, greeted Barry instead, showed him around the site and made him a cup of very hot tea in a mug that had 'measured twice, cut once' on the side of it. Barry pointed out to Steve that he would indeed be measuring twice with his two high precision noise meters.

The site was pretty straightforward, an upstairs with an office, boardroom and kitchen area, and a machine shop downstairs with various woodworking machines. As he was upstairs and his tea hadn't cooled down enough to drink yet, Barry decided to start his noise survey in the office. He waved the ACME 500 around slowly in a wide figure-eight to sample as large an area as possible before pausing the measurement and jotting down the value on his note pad. He repeated this process with the ZP-3, and then repeated it again with the foam ball rammed firmly back on the microphone. [C22](#)

LETTER TO THE EDITOR

Regulator irritates competent consultants

By BSc (Hons) MIOA



Regulator cracks down on rogue consultants

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offering significantly lower prices. This disparity often compounds consultants away from the task and provides little motivation to improve standards. These budget assessments are also less likely to result in improvements, saving clients further money unless they face prosecution.

Where are the prosecutions?
A quick internet search reveals that the last known prosecution of a noise consultant by the HSE was in 2020, resulting in a mere £1,400 fine. There is no indication that the consultants were banned from continuing their services. If past assessments are as widespread as the HSE suggests, one must wonder where all the prosecutions are and whether the fines are sufficient deterrents.

Where do we go from here?
While the HSE's new Workplace Noise intervention programme may address some issues, it feels like a case of closing the stable door after the horse has bolted. The buyers guide mentioned in the article does not contribute to 'showing they have a suitable level of experience', but workplace health and safety managers may not be qualified to assess this, especially when pressured to justify higher costs. A more effective solution would be a robust registration process, similar to the ANCR register of accredited sound transmission testers. This would provide a straightforward enforcement mechanism for the HSE to ensure employers used accredited consultants. Although this might increase costs for employers, it would guarantee high quality consultancy, compliance with legislation and protection for employees from hearing damage. Until the HSE implements proper regulation or enforcement, the problem will persist, and no amount of articles in Acoustics Bulletin will change that.

Legal requirements

- The Control of Noise at Work Regulations place duties on employers to:
 - Assess the risks to health and safety (Reg 5)
 - Reg 5(1) – suitable and sufficient risk assessment
 - Reg 5(2) – assess levels of noise to which employees are exposed
 - Reg 5(3) – lists what risk assessment shall consider
 - Eliminate or control noise exposure (Reg 6)
 - Provide hearing protection (Reg 7)
 - Carry out health surveillance where there is a risk to hearing (Reg 9)
 - Provide information, instruction and training (Reg 10)

Risk Assessment

- Reg 5(1) – suitable and sufficient assessment of the risk from noise to the health and safety of employees
 - Drawn up by someone who is competent for carry out the task
 - Based on advice and information from competent sources
 - Identifies where there may be a risk from noise and who is affected
 - Contains reliable estimate of employees' noise exposure and comparison with EAVs/ELVs
 - Identifies measures needed to eliminate or reduce risks and exposures
 - Identifies those employees who need health surveillance and whether any at particular risk

Risk Assessment

- Remember:
 - Risk assessment should enable employer to identify any employees who are at risk AND establish actions needed to prevent or adequately control that risk
 - Noise Regulations place duties on the EMPLOYER – these can't be delegated to a NOISE CONSULTANT
 - Management of Health and Safety at Work Regulations 1999
 - Reg 7(1) – duty on EMPLOYER to have access to competent help
 - Reg 7(5) – competence based on sufficient training and experience or knowledge and other qualities

Competence

- Buyer's Guide produced by BOHS, ANC, IOA, and IOSH (with HSE support) on picking a workplace noise consultants suggests competence demonstrated by:
 - Academic/other qualifications
 - Member of professional body
 - Suitable level of experience (previous work, appropriate supervision)
 - Provide examples of previous work

<https://www.bohs.org/app/uploads/2021/09/Buyers-Guide-for-workplace-noise-consultants.pdf>

New BOHS template

- What should be in a noise survey?
 - Base
 - Intermediate
 - Comprehensive
- Competence
- Measurements
- Assessment against CoVaWR 2005 and advice
- Control measures
- Health Surveillance
- IIT
- Hearing Protection
- Measurement equipment used

A Template for Workplace Noise Survey Reports

This document tells you what should be in a workplace noise survey report.

In this template:

- **The Assessor** is the person doing the noise survey and writing the report.
- **The Dutyholder** is the person responsible for controlling the noise risk (usually the client).

There are three levels of report depending on what you have been asked to do and your competency. The three levels of reporting are:

Base Level

1. The **Assessor** gathers noise data (measured or from other sources) for each employee, group of employees, work location or task.
2. The **Assessor** reports the noise data and the expected daily or weekly exposures for each employee, group of employees, work location or task.
3. The **Assessor** tells the **Dutyholder** where to have Hearing Protection Zones.
4. The **Assessor** calculates the required performance for hearing protection and advises on over protection. The Assessor may also advise on the type, make, and use of hearing protection.
5. The **Assessor** gives the **Dutyholder** information on 'buy quiet'. Reference to the HSE webpages may be helpful www.hse.gov.uk/noise/choosequieter.htm.
6. The **Assessor** tells the **Dutyholder** if employees need health surveillance.

Intermediate Level

1. The **Assessor** completes all the parts of a Base Level report.
2. The **Assessor** tells the **Dutyholder** if employees need to be given Information, Instruction and Training (IIT) for workplace noise. The Assessor can advise on the content, style and provision of the IIT.
3. The **Assessor** tells the **Dutyholder** about the generic noise control measures HSE expects to see for the type of work being done. The Assessor should list the relevant controls from HSE's:
 - Workplace noise guidance document www.hse.gov.uk/pubns/books/l108.htm
 - Sound solutions document www.hse.gov.uk/pubns/books/hsg232.htm
 - Case studies <http://www.hse.gov.uk/noise/casestudies/index.htm>

Comprehensive Level

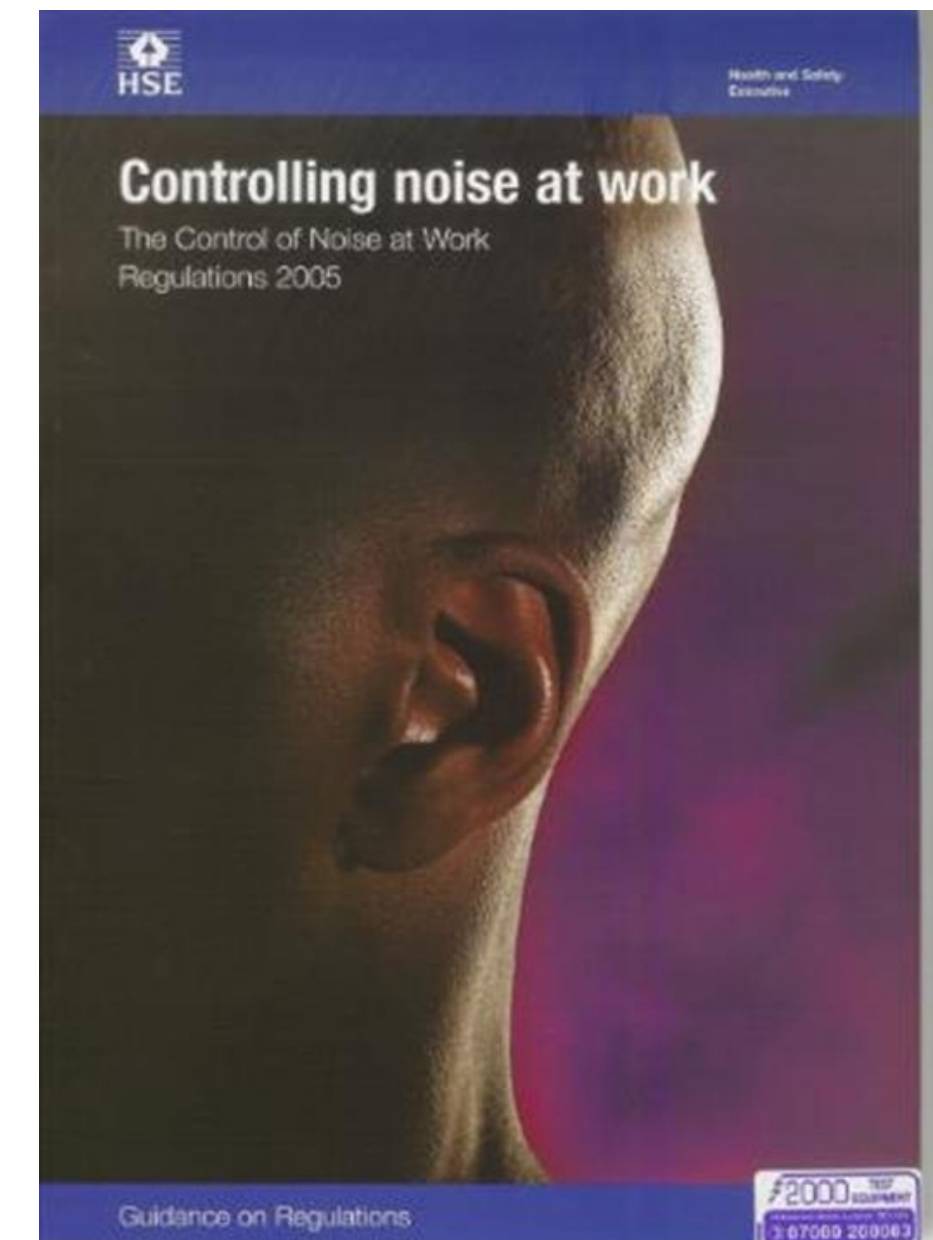
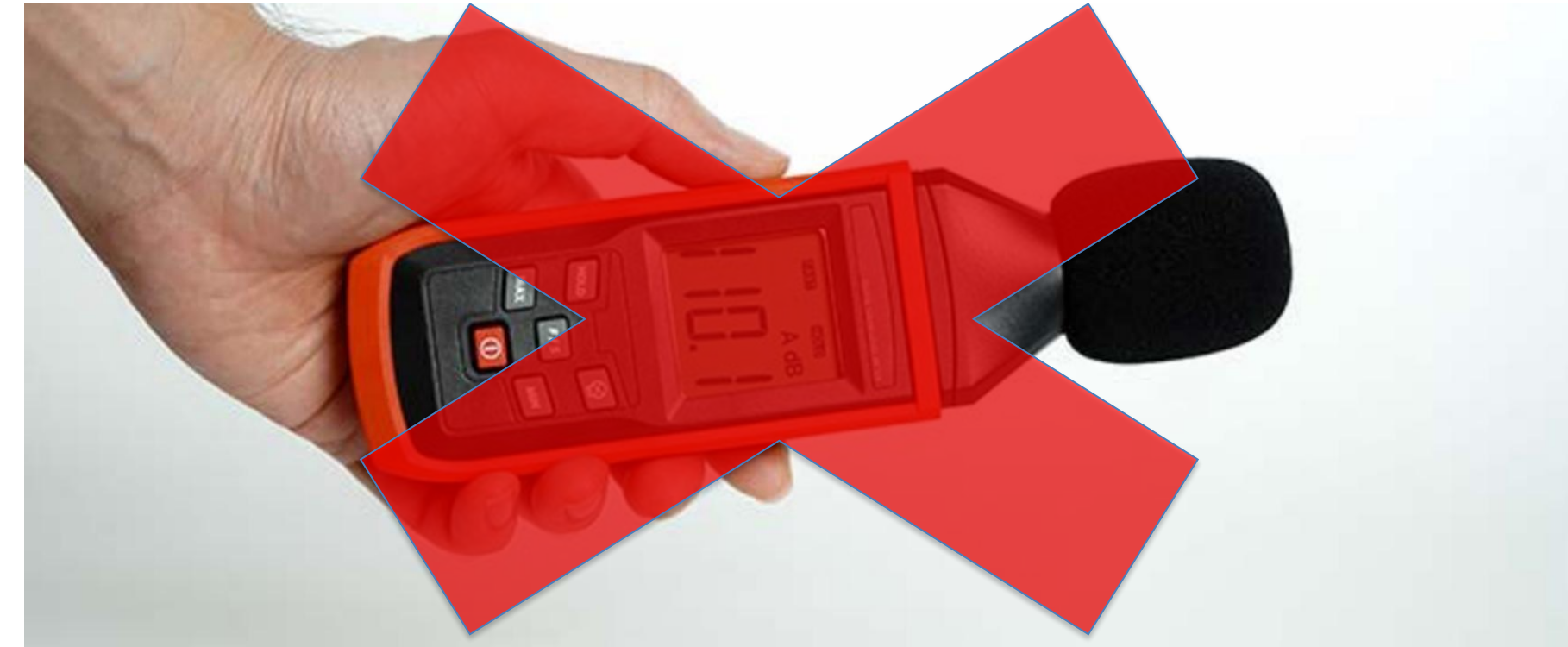
1. The **Assessor** will complete all the parts of a Base and Intermediate Level report.
2. The **Assessor** tells the **Dutyholder** about specific noise control measures for the type of work being done. The advice will be based on the Assessor's technical knowledge but may include:
 - calculations of expected noise levels after the controls are in place.
 - information on where to find installers.
 - information on where to find suppliers.

Common failings

- Purpose of work carried out not stated
- Information on instrumentation used and calibration status absent or unclear
- Information on measurement methodology poor in relation to instrumentation, measurement location, parameters measured (L108, BS EN ISO 9612)
- Limited information identifying affected employees or work activities/processes or operating conditions
- Inadequate guidance on defining hearing protection zones and provision of hearing protection (CUFF)
- Very limited advice on engineering controls – generic and site-specific method

Noise measurement

- **From L108 Appendix 2**
- **What instruments should I use?**
- The basic instrument for measuring noise is an integrating sound level meter. These meters are usually hand-held and are suitable for measurements made at work locations where it is possible to follow the operator sufficiently closely to get a representative sample of the noise.
- Integrating sound level meters provide information on the noise level over a measurement period and may also feature facilities such as data logging for long-term measurements at a location



Value required	Possible noise measurements	Additional information required
Daily personal noise exposure ($L_{EP,d}$)	A-weighted sound pressure level (L_{Aeq}) for each noisy task or period in a day	The exposure duration of each noisy task or period in a day
	Noise dose in Pa^2h for a representative period	Duration of measurement Duration of person's exposure in the day
	Noise dose as a percentage $L_{EP,d}$ value for a representative period	Duration of measurement Duration of person's exposure in the day $L_{EP,d}$ value that corresponds to 100% (normally 85 or 80 dB)
Daily personal noise exposure from a number of discrete events	A-weighted sound pressure level (L_{Aeq}) over a period containing a known number of events	Number of events included in measurement Duration of measurement Number of events in person's working day
	A-weighted sound exposure level (L_{AE}) containing a known number of events	Number of events included in measurement Number of events in person's working day
Peak noise exposure	C-weighted peak sound pressure level (L_{Cpeak}) for each noisy task or period in a day	None
Estimate of A-weighted sound pressure level at ear when hearing protection is worn	Linear/unweighted/ Z-weighted octave band sound pressure level (L_{eq})	Octave-band assumed protection values for protector
	C- and A-weighted sound pressure levels (L_{Ceq} and L_{Aeq})	H, M and L values for protector
	C-weighted sound pressure level (L_{Ceq})	SNR value for protector
Estimate of C-weighted peak level at ear when hearing protection worn	See above as in 'Peak noise exposure'	H, M and L values for protector Type of noise source (Table 6) Modified sound attenuation values (Table 7)

- From L108 Appendix 2

From consultant training material!

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Without proper noise-measuring equipment, it's difficult to accurately assess the noise level to which you're being exposed.

HSE's focus on consultants

- HSE reviewing consultants' work where there is a cause for concern – ie where there is reasonable evidence of risk at the employer's site that is suspected to be attributable to an act or omission by consultant
- Technical review considers:
 - How acts or omissions may have contributed to risk under Section 3 of the Health and Safety at Work etc Act 1974
 - Competency of consultancy – review experience, qualifications, formal training, professional membership, adequacy of quality assurance arrangements including CPD

Enforcement

- Several options for enforcement – including prosecution, notices, and letters – also verbal advice
- Enforcement of consultants is under Section 3 of the Health and Safety at Work etc Act 1974 – the Control of Noise at Work Regulations place NO duties on consultants
- Need evidence of a material breach or the existence of significant risk as a direct consequence of the consultant's advice to take enforcement action – eg:
 - Gross underestimate of noise exposures and there is a noise risk
 - Giving false assurances eg hearing protection is not needed when it is or existing noise controls are adequate when they are not

Raising standards

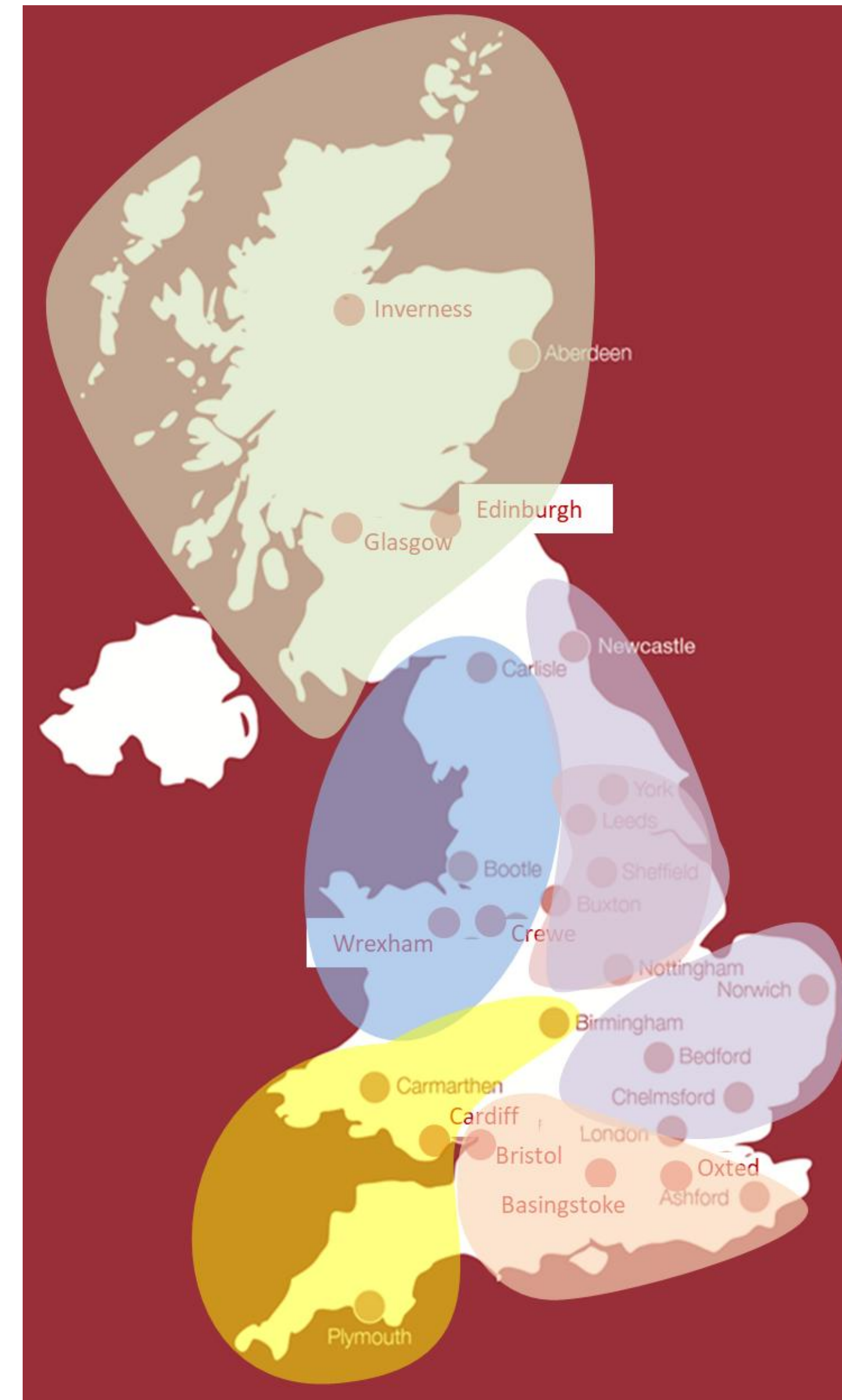
- Promote good practice guidance for members
- Educate employers - promote the buyer guide to clients – even if they do not select you – this is what a good consultant should be doing/what HSE expects to see
- Promote L108 – only contains general guidance but it would be a good start for both employers and consultants
- Promote relevant training courses, for example
 - IOA Certificate of Competence in Workplace Noise Risk Assessment
 - BOHS Noise – Measurements and Its Effects M503
- Make being part of a professional body mean something - for example spot checks on the competence of BOHS members providing consultancy services for workplace noise, review CPD hours

Raising standards

- Ensure good consultants are not disadvantaged and lose out to competitors offering significantly lower prices (poorer services??)
- Help spot and report poor practice – if you see the following:
 - HEALTH - Under specifying hearing protection, incorrectly specified HPZs, failure to identify noise as a hazard
 - SAFETY - Over specifying hearing protection, failure to correctly assess the audibility of acoustic warning signals
- Make complaints about poor performers via professional body
- Raise concerns to HSE via <https://www.hse.gov.uk/contact/tell-us-about-a-health-and-safety-issue.htm>

We need your help

- Many consultants have large number of clients – spanning nationally across many different industries
- You can:
 - Influence large numbers of employers and therefore the health of large numbers of employees
 - Raise standards and levels of compliance



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➤ Publications and Products

➤ Training and Events

➤ Testing and Monitoring

➤ Research and Consultancy

Noise: Management of Exposure in the Workplace

Select location/date

Buxton : 04/02/2026

Book Course

04 February 2026

Introduction



Can't see the video above? [View it here](#)

The Control of Noise at Work Regulations 2005 are designed to protect workers from injury resulting from exposure to noise

Key Information

Price:
£580 per person

Course length:
1 day

Available as:
[Face-to-face](#)
[In-company](#)

Email: HSEtraining@hse.gov.uk
Telephone: +44 (0)203 028 3704

You might be interested in...

- [Hand-Arm Vibration: Management in the Workplace](#)
- [Controlling Exposures to Respirable Crystalline Silica \(RCS\)](#)
- [NEBOSH HSE Certificate in Managing Stress at Work - MANCHESTER](#)