



A view from the regulator – Basics

Chris Steel

Principal Specialist Inspector (Noise & Vibration)

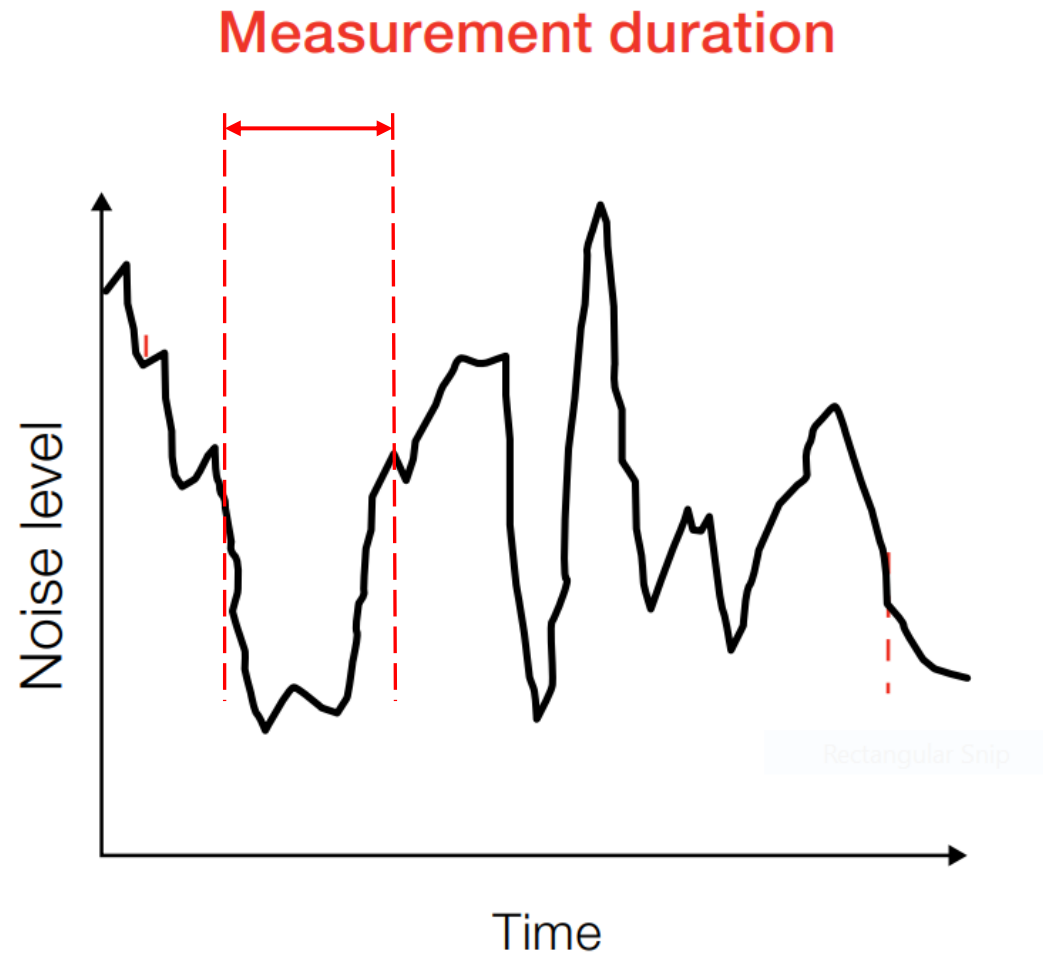
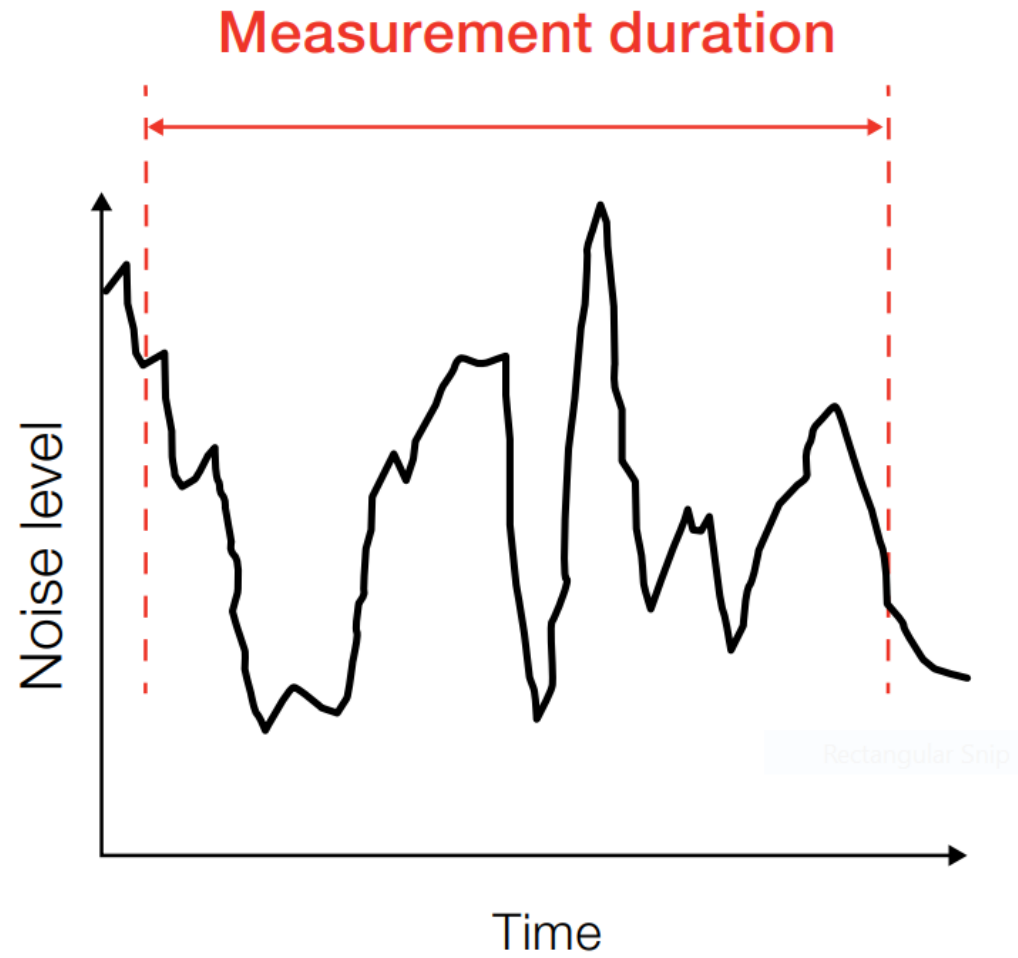
7th November 2023

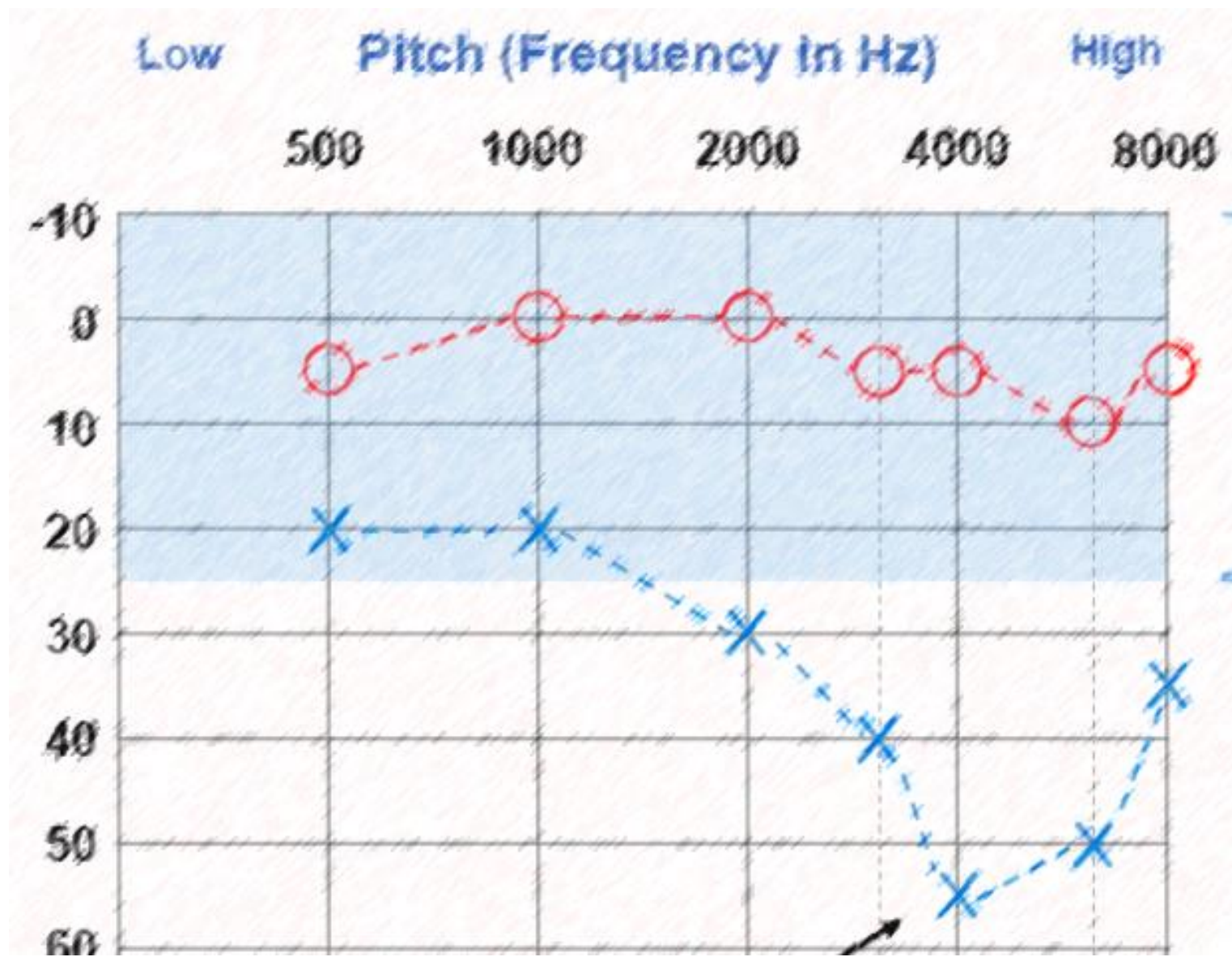
Section 2. Health and Safety at Work etc. Act 1974



Section 3. Health and Safety at Work etc. Act 1974







Control of Noise at Work 2005 & it's guidance in L108

**Assess the
risks (Reg 5)**

- Identify noise hazards
- Identify workers at particular risk from exposure to noise
- Estimate likely exposure to noise
- Identify measures required to eliminate or reduce risks
- Make a record of action taken and planned



<i>Instrument</i>	<i>Specification standards</i>	<i>Periodic verification standards</i>
	<i>Current standards</i>	
Sound level meter	BS EN 61672-1 ²⁰ Class 1 or 2 IEC 61672-1 Class 1 or 2	BS EN 61672-3 ²¹ IEC 61672-3
Dosemeter	BS EN 61252 ²² IEC 61252	BS EN 61252 IEC 61252
Calibrator	BS EN 60942 ²³ Class LS, 1 or 2 IEC 60942 Class LS, 1 or 2	BS EN 60942 IEC 60942
	<i>Superseded standards</i>	
Sound level meter	BS EN 60804 ²⁴ Type 0, 1 or 2 IEC 804 Type 0, 1 or 2	BS 7580-1 ²⁵ for Type 1 and 2 BS 7580-2 ²⁶ for Type 2 only
Dosemeter	BS 6402:1994 ²⁷	BS 6402:1994
Calibrator	BS 7189 ²⁸ Class 0, 1 or 2 IEC 942 Class 0, 1 or 2	No earlier standard


**Eliminate or
control noise
risks (Reg 6)**

- Eliminate or reduce risks using good practice and known control and management solutions
- Obtain quieter tools and machinery
- For the higher-risk areas, plan and put in place technical and organisational control measures
- Make sure the legal limits on noise exposure are not exceeded



Remove any element and overexposure to noise is prevented

Reduce **loudness** or **duration** and exposure is reduced

- 
- **Cutting heads/saws**
 - **Fans/air movement**
 - **Compressed air**
 - **Motors and drives**
 - **Vibrating machine casings**
 - **Wheels and bearings**

Hearing protection *(Reg 7)*

- Where there remains a risk, issue your employees with hearing protection
- Make use mandatory for the high-risk cases and manage use with hearing protection zones
- Remember – hearing protection is not an alternative to noise control
- Employees: use hearing protection where its use is mandatory



Figure 1 Hearing protection zone sign

**Maintain and
use noise-
control
equipment**
(Reg 8)

- Maintain any noise-control equipment and hearing protection
- Ensure that anything supplied is fully and properly used
- Employees: use the controls provided and report any defects









**Health
surveillance**
(Reg 9)

- Provide health surveillance (including hearing checks) for those at risk
- Use the results to review controls and further protect individuals
- Employees: co-operate and attend hearing checks



...equipment should be maintained and calibrated according to the recommendations of **BS EN ISO 8253-1.**



BS EN ISO 8253-1 gives criteria which
should be met in test rooms



OR

Information should be obtained on the attenuation of the headsets, tested according to **BS EN ISO 4869-1, which can be used to determine acceptable background levels**

Have you been exposed to ototoxic drugs or solvents,
eg streptomycin, quinine, toluene?

YES/NO

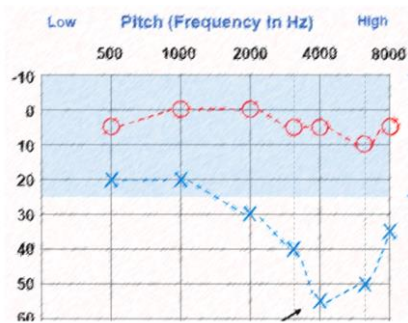
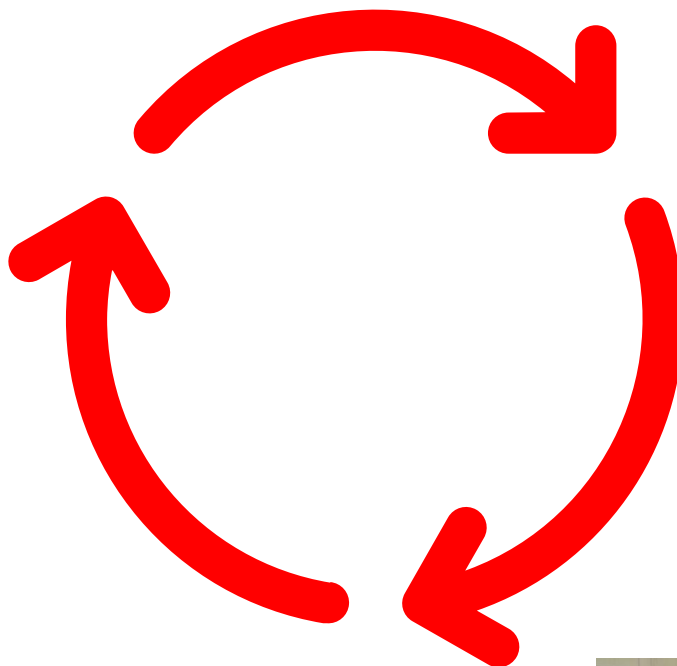


**Worker
information
and training**
(Reg 10)

- Give employees information, instruction and training on:
 - the risks and safe working practices
 - control measures, hearing protection and health surveillance
- Encourage workers to take part in consultations in assessments




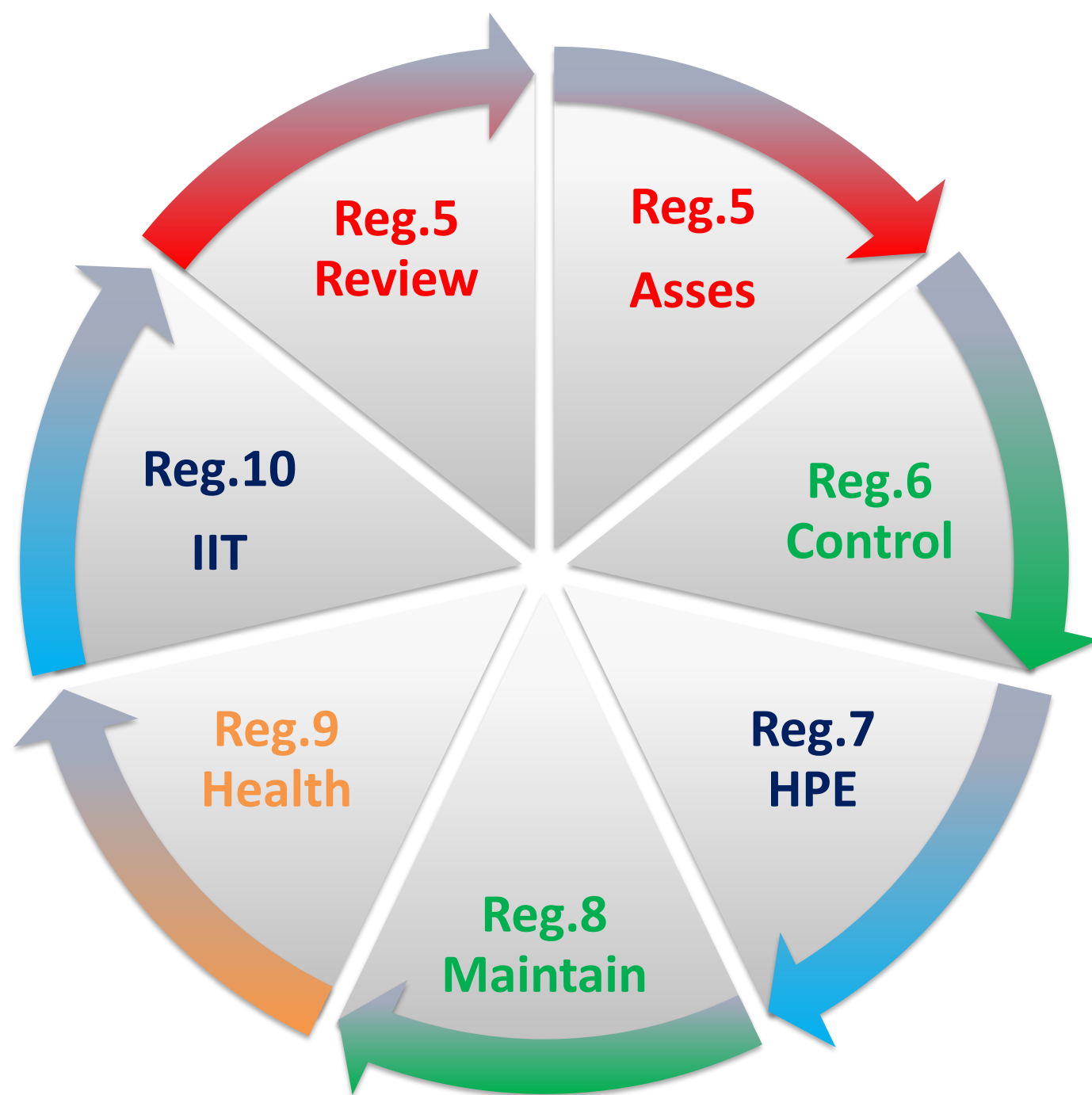
Figure 28 The problems of fitting muff-type ear protectors (eg with long hair, safety glasses or jewellery)



Review
(Reg 5)

- Monitor the workplace for changes that affect noise exposures
- Monitor grouped health surveillance results to identify where controls are failing
- Look out for new ways to reduce risks

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- **Noise levels change**
 - **New noise controls become available**
 - **Health Surveillance shows damage**
 - **Controls you couldn't use become usable**



Reg 5 <https://www.hse.gov.uk/noise/assets/docs/noise-exp-calc.xlsm>

Reg 6 <https://www.hse.gov.uk/pubns/top10noise.pdf>

Reg 7 <https://www.hse.gov.uk/noise/assets/docs/hearingcalc.xlsm>

Reg 8 <https://www.hse.gov.uk/engineering/noise.htm>

Reg 9 <https://www.hse.gov.uk/health-surveillance/>

Reg 10 <https://www.hse.gov.uk/noise/worried.htm>



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