



**Science and
Technology
Facilities Council**

Control of Noise at Work

STFC Safety Code No 18

Rev. 1.3, Issued October 2018

Revisions

| | | |
|-----|---|--------------|
| 1 | Initial Launch | June 2008 |
| 1.1 | Amendments to audit checklist | May 2013 |
| 1.2 | Document Retention Policy Added | August 2014 |
| 1.3 | Minor changes to reflect the launch of SHE Assure | October 2018 |

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Control of Noise at Work

1. Purpose

Hearing loss caused by exposure to noise at work continues to be a significant occupational health hazard. Some 170,000 people in the UK suffer deafness, tinnitus (permanent ringing in the ears) or other ear/hearing conditions as a result of exposure to excessive noise at work.

The Control of Noise at Work Regulations 2005 exists to ensure that workers' hearing is protected from excessive noise at their place of work, which could cause them to lose their hearing and/or suffer from hearing problems.

This policy outlines the steps to be taken by STFC to eliminate or reduce the risk from exposure to noise for staff or others and establishes noise limits under which work can be carried out in a safe manner.

2. Scope

This code applies to all work conducted on STFC sites by employees, facility users, visitors, and tenants, and to work conducted by STFC staff at other sites in the course of undertaking Council business.

Contractors are responsible for undertaking their own risk assessments including, as appropriate, noise assessments. Contract Supervising Officers should ensure that noise assessments have been completed for work undertaken on their behalf, see SHE Code 15 '[Management of Contractors](#)', as appropriate providing information on noisy areas in which work is planned. Contractor assessments should consider the impact of their noise on STFC staff working close or adjacent to proposed work areas.

It does not apply to low-level noise which is a nuisance but causes no risk of hearing damage, see Appendix 1.

This code does not explicitly address the related hazard of vibration induced occupational ill health, where this is believed to be a hazard contact your local SHE team.

3. Definitions

3.1 Noise Action Values

Noise regulations establish the requirement for employers to take specific actions at certain Noise Action Values, these relate to the: level of exposure to noise averaged over a working day or week; and the maximum noise (peak sound pressure) to which employees are exposed in a working day.

The Noise Action Values are:

- (i) the Lower Exposure Action Values:
 - Daily or weekly exposure of 80 dB (A); and
 - Peak sound pressure of 135 dB (C)
- (ii) the Upper Exposure Action Values:
 - Daily or weekly exposure of 85 dB (A)

Peak sound pressure of 137 dB (C)

3.3.2 Noise Exposure Limit Values

Noise regulations establish Noise Exposure Limit Values at or above which employees can not be exposed, these are: Daily or weekly exposure of 87 dB (A); and Peak sound pressure of 140 dB (C)

3.3.3 Noise assessment

An assessment to enable identification of where there may be a risk from noise and who may be affected, containing a reliable estimate of employee's exposure levels, identifying what control measures are required and identifying whether any employees require health surveillance, see Appendix 2.

The assessment must be undertaken at a time that is representative of the work carried out by a competent Noise Assessor and needs to take account of:

- (a) the way they work or are likely to work;
- (b) the work they do or are likely to do; and
- (c) the ways the work can vary.

Noise assessments shall only be undertaken by Competent Noise Assessors using noise assessment meters/equipment, maintained and calibrated to national standards.

4. Responsibilities

4.1 Line Managers and Supervisors shall:

- 4.1.1 Ensure where practicable that noise hazards are eliminated or reduced at source, and/or the need for employees to undertake work in noisy areas is eliminated or reduced so far as is reasonably practicable. Typically, consideration of noise as a hazard might be necessary where individuals need to raise their voices to conduct a normal conversation when about 2 metres apart, for at least part of the working day, see Appendix 1.
- 4.1.2 Where noise hazards exist in work areas, undertake and document a Risk Assessment, see SHE Code 6 '[Risk Management](#)', based upon a Noise Assessment undertaken by a Competent Noise Assessor through SHE Group, see Appendix 2.
- 4.1.3 Ensure that all actions arising from the Risk Assessment are undertaken to plan and a follow up Noise Assessment undertaken to confirm the effectiveness of remedial actions, see Appendix 3, updating the Risk Assessment with progress.
- 4.1.4 Where noise levels are at or above the Lower Exposure Action Values:
 - undertake a Noise Assessment; and
 - provide employees with hearing protection if they request it, see Appendix 4.

and where noise levels are at or above the Upper Exposure Action Values ensure that:

- employees are provided with hearing protection and ensure that the protection is worn appropriately, see Appendix 4;
- hearing protection zones are identified with appropriate signs (areas where hearing protection is compulsory);
- training on how to use and maintain the hearing protection is provided to employees, and as appropriate protection fitted by competent staff; and

- employees working regularly in such areas undertake routine hearing health surveillance.

And where noise levels are at or above Noise Exposure Limit Values ensure no individuals are exposed to such levels while working.

- 4.1.5 Ensure that the following staff register and undertake regular hearing health surveillance through local Occupational Health teams:
- all staff regularly working in areas assessed at or above the Upper Exposure Action Value;
 - all staff with pre-existing hearing problems working in areas at or above the Lower Exposure Action Value; and
 - as appropriate other staff identified in Risk Assessments.
- 4.1.6 Consider when purchasing, or designing equipment for in-house construction, the potential for noise so that noise hazards can be eliminated at source.
- 4.1.7 Vibration hazards resulting in vibration ‘white finger’ and upper limb disorders can be associated with noise hazards. Where it is suspected that vibration hazards exist, contact local SHE teams.

4.2 Employees shall:

- 4.2.1 Inform their manager/supervisor of any physical condition which may affect their capacity to carry out work in a noisy area or if they have already suffered hearing loss or damage.
- 4.2.2 Inform their manager/supervisor if they think that they are working in or likely to work in a noisy area that could pose a risk of hearing damage. Typically this might be the case if it is necessary to raise your voice to have a normal conversation when about 2 metres apart, for at least part of the working day, see Appendix 1.
- 4.2.3 Use, maintain, and store appropriately any hearing protection equipment provided to minimise the risk of hearing damage arising from work in a noisy area, reporting as appropriate any equipment defects that may affect its effectiveness. The use of such equipment shall be mandatory in areas at or above the Upper Exposure Action Value.
- 4.2.4 Report any defects in hearing protection controls and equipment or noise incidents, see SHE Code 5, “Incident Reporting and Investigation”.

4.3 SHE Group shall:

- 4.3.1 Maintain a register of all STFC noise restricted areas detailing their location, work undertaken and whether they are at or above the Lower or Upper Action Values.
- 4.3.2 Ensure that a Competent Noise Assessor using suitably calibrated and maintained noise assessment equipment is available when requested by managers to undertake Noise Assessments.
- 4.3.3 Provide Noise Assessment reports to managers outlining, as appropriate, suggested remedial actions to eliminate, reduce or control sources of noise, or the provision of appropriate hearing protection, see Appendix 3, and that, as necessary, following changes to equipment and/or work practises follow up re-assessments are conducted at the request of managers.
- 4.3.4 Maintain a stock, directly or through others, of appropriate hearing protection e.g. ear defenders, ear plugs or ear caps for staff.

4.4 Occupational Health shall:

- 4.4.1 Carry out regular hearing health surveillance, at the request of managers or supervisors, where employees have or are likely to be exposed at or above the Upper Action Value, or if they already suffer from hearing loss and work in areas at or above the Lower Action Value, see Appendix 5.

Appendix 1 Assessing if a noise problem could exist

Questions to help decide if a workplace may exceed noise Action Values

Is the noise intrusive for most of the working day? e.g. like a busy street.

Is it necessary to raise your voice to have a normal conversation when about 2 metres apart, for at least part of the working day?

Do employees use noisy power tools or machinery for more than half an hour each day?

Are there any noises due to impacts e.g. hammering or cartridge operated tools etc?

Noise is measured in decibels, dB, usually on an average basis dB(A). Each 3 dB(A) change in noise level is equivalent to doubling the sound level received by the ear. Typical examples of noise levels are:

- A quiet office – 40 to 50 dB(A)
- A lorry or tractor cab – 80 dB(A)
- A power drill – 85 dB(A)
- A road drill – 100 to 110 dB(A)

Appendix 2 Guidance for undertaking Risk Assessments in potentially noisy areas

This assessment is more than just taking measurements of the noise, it must include what is required to ensure that employees are not exposed to excessive levels of noise, see SHE Code 6 '[Risk Management](#)', and should include:-

- Where there is a risk from noise and who may be affected
- A reliable estimate of employees' exposure levels and a comparison with exposure action values and limit values.
- What is required to comply with the law, either noise control measures or hearing protection
- Identify anyone particularly at risk and who may need health surveillance.

Any estimate of employees' exposure must be representative of the work they do or are likely to do and must be based on reliable information, this may be from:-

- Measurements in the workplace – Noise Assessment
- Data from equipment suppliers
- Information from similar workplaces

The findings of the Risk Assessment must be recorded and should include a prioritised action plan. This action plan must identify anything necessary to comply with the law and set out all that is reasonably practicable to control the noise risks including:-

- What has already been done
- What is required to be done
- A realistic timetable for the work
- Who is responsible for ensuring the work is carried out satisfactorily
- An appropriate timescale for review of the assessment

Further information can be found in the HSE guidance document INDG362, "[Noise at work: Guidance for employers on the Control of Noise at Work Regulations 2005](#)"

Appendix 3 Controlling Noise

Wherever there is noise at work, alternative equipment, processes or working methods should be investigated in order to make the work quieter or exposure time to individuals shorter.

Using the Risk Assessment

Where the risk assessment shows that employees will be exposed at or above the Upper Exposure Action Value, a noise control plan must be established and implemented by the management responsible for the activity/area. Based upon advice from a Competent Noise Assessor the plan should establish a prioritised timetable setting out what needs to be remedied immediately and what is possible to remedy over a longer period of time.

Noise Reduction Methods

If the loud noise cannot be removed altogether, other options must be looked at.

The following methods should be considered:-

- 1 Eliminating the noise at source, for example:
 - Carrying out the work in a different, quieter, way;
 - Replacing machinery with a less noisy alternatives; and
 - By introducing low-noise purchasing policies for equipment
- 2 Reducing the noise at source through engineering controls, for example:
 - Avoiding metal on metal impacts;
 - Reducing vibration of panels by adding material;
 - Isolating vibrating machinery from its surroundings with flexible couplings or anti-vibration mountings;
 - Fitting silencers to air exhaust nozzles and vents; and
 - Regularly maintaining machinery e.g. lubrication and adjustments
- 3 Modifying noise paths, for example:
 - Erect enclosures around machinery to reduce the amount of noise emitted or reflected into the workplace;
 - Use screens to block the direct path of the sound, installing an-echoic surfaces;
 - Re-align machines to change the path of the sound; and
 - Position sources of noise further away from the work
- 4 Workplace design and layout for low noise emission, for example:
 - Use absorptive materials e.g. open cell foam or mineral wool, to reduce reflected sound;
 - Place noisy equipment in a separate room away from the work area; and
 - Ensure noisy areas are not used as regular workplaces
- 5 Limiting the time spent/exposure of staff to noise, for example:
 - Taking regular breaks from the noisy area;
 - Staff rotation work methods; and
 - Ensuring only people who need to be in the noisy area are there and do not stay longer than they need to.

Appendix 4 Hearing Protection

Provision of Hearing Protection

Hearing protectors are available through the SHE Group or others at each STFC site. Protectors should be issued for personal use and not on a shared basis wherever possible.

Use of Hearing Protection

Hearing protection must not be used as an alternative to controlling noise.

Hearing protection should be issued to employees when:

- Extra protection is required above what can be achieved through noise control; and
- As a short term measure whilst other methods of noise control are put in place.

The protection should be suitable for the environment in which it will be worn i.e. comfortable and hygienic. Consideration should be given to the need for the protection to be worn with other protective equipment e.g. hard hat, eye protection etc.

Give employees the chance to choose from a range of acceptable hearing protectors, and ensure there is an appropriate place for them to store their hearing protection.

If the user wears glasses, jewellery, has long hair or a beard there may be problems ensuring a satisfactory fit of hearing protection, for example with earmuffs, please consult SHE Group.

Maintenance of Hearing Protection

In order to ensure the hearing protection remains in good condition and works effectively ensure that:

- Earmuff seals are undamaged;
- The headband tension is not reduced;
- No modifications have been made to the earmuffs; and
- Ensure disposable ear plugs are clean, soft and pliable – especially if re-used.

Appendix 5 Provision of Health Surveillance

Health surveillance, in the form of hearing checks, must be provided for any employees who may be regularly exposed at or above the Upper Exposure Action Value, and already suffer from hearing loss or are particularly sensitive to hearing damage.

The purpose of health surveillance is to:

- Give warning of employees who might be suffering from early signs of hearing damage;
- Provide opportunities for action to be taken to prevent the situation getting worse; and
- Ensure that any controls in place are working

This surveillance normally consists of:

- Regular hearing checks in controlled conditions;
- Informing employees of the results of these checks;
- Keeping relevant records; and
- Ensuring that employees are seen by a doctor where hearing damage is identified

Health surveillance will be carried out by or arranged by the Occupational Health Centre at the STFC site, or where this does not exist by a GP or alternative providers.

Appendix 6 Training

| Role | Initial Training | Refresher | Frequency | Comments |
|--------------------------|---|----------------------------|---|---|
| All Staff | Through the launch cascade for this code. Through SHE induction training for new starters. | Regular follow-up training | 3 Years or sooner if actual incident statistics or active monitoring indicate issues. | |
| Competent Noise Assessor | 5 Days | 5 Days | 5 years | |
| Suitable Course: | Woodland Grange “ Noise Assessment Competence” | | | |
| Contractors | N/A | N/A | N/A | Contractors must provide their Contract Supervising Officer with a risk assessment relating to work carried out for STFC as necessary including a noise assessment where noisy work is planned. |

Appendix 7 Audit checklist

| Ref. | Item | Rating | Comments |
|--|--|--------|----------|
| 1 (Section 4.3.3) | Have Noise Assessments reports been obtained for all activities with the potential for harm to health or environmental nuisance? | | |
| 2 | Are the Risk Assessments of noisy areas, including the Noise Assessment report, documented in STFC SHE software system? | | |
| 3 (Section 4.1.3) | Have actions arising from Risk Assessments of noisy areas and Noise Assessment reports been implemented to plan and follow up Noise Assessments conducted? | | |
| 4 (Section 4.1.4) (Section 4.1.5) (Section 4.4.1) | Have staff working in noisy areas undertaken health surveillance through Occupational Health teams? | | |
| 5 (Section 4.3.1) | Is there a register of noise restricted areas? | | |
| 6 | Have Risk Assessments for noisy areas been reviewed? on a 2 yearly basis? | | |
| 7 (Section 4.3.2) | Have Noise Assessments been undertaken by a competent Noise Assessor? | | |
| 8 (Section 4.1.4) | Are noise warning signs and noise protection equipment sited at entrances to noisy areas? | | |
| 9 (Section 4.1.4) (Section 4.3.4) | Is hearing PPE available to staff?, is it being used as required in noisy areas? is it in good condition? is it stored appropriately? | | |

Appendix 8 Document Retention Policy

| Records Established | Minimum Retention Period | Responsible Record Keeper | Location of Records | Comments/Justifications |
|----------------------------------|--------------------------|---------------------------|----------------------|---------------------------------------|
| Area Noise assessments / surveys | Current + 50 Years | SHE Group | Local Record Systems | Required in case of future litigation |
| Other related correspondence | Current + 50 Years | SHE Group | Local Record Systems | Required in case of future litigation |