



Falkirk Council

**GUIDANCE NOTE FOR
MANAGERS
FOR THE
CONTROL OF
NOISE AT WORK**



February 2018

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1.0 INTRODUCTION

Falkirk Council recognises that there are health risks to employees associated with increased noise during their work activities depending on their working environment. Examples of working environments where employees may be exposed to risk from noise levels although not exhaustive are:

- workshops containing operational/processing machinery;
- grounds and countryside maintenance;
- roads maintenance;
- buildings maintenance;
- refuse disposal;
- street cleansing;
- plant rooms;
- music workshops/entertainment.

This guidance provides Services with information to assist in the development and management of their own procedures for managing noise at work. It includes the standards that require to be in place to comply with Health & Safety Legislation.

2.0 CONTROL OF NOISE AT WORK REGULATIONS

The Control of Noise at Work Regulations 2005 issued by the HSE defines “noise” as any audible sound. Noise is measured in decibels (dB) and an (A) weighting is used to measure the loudness perceived by the human ear.. Where employees are likely to be exposed to a sudden loud bang – associated with an immediate damage to hearing- a measurement of the peak sound pressure reading can be taken, a (C) weighting is used to measure the peak sound pressure.

Services must identify working environments where employees may be exposed to the potential risks from noise. Noise levels must be identified and suitable control measures put in place to control the risk. Managers must also ensure that regular occupational health screening programmes are in place to monitor and control such risks to employees.

The Regulations and related legislation require that the following specific duties are complied with:

- **Assessment of exposure** – managers must assess exposure and identify, using a noise assessment, those employees who might be at risk of hearing damage and take action to reduce noise exposure. Regular occupational health screening should also be in place where appropriate (see section 3.4).
- **Risk Assessments**- managers must identify areas/equipment where employees are exposed to noise at or above the Upper Exposure Action Level (see Section 2.2) and carry out a risk assessment to reduce exposure to noise to as low a level as possible and/ or provide appropriate PPE to protect the employees hearing;
- **Assessment records** – noise assessment records of the workplace and any reviews must be kept by the service for a period of not less than 25 years;
- **Elimination or control of exposure to noise**– where an employee is likely to be exposed at or above the Lower Exposure Action Level then the emphasis should be on eliminating the risk completely wherever reasonably practicable otherwise reduce the risk to as low a level as possible (other than the use of PPE). Examples of control measures are shown at 3.1 below;

- **Hearing protection** – It is a legal requirement for hearing protection to be made available to employees when the noise exposure is at or above the Lower Exposure Action Value. Hearing protection must be provided and worn when the noise employees are exposed to is at or exceeds the Upper Exposure Action Value. Hearing protection zones must be put in place in areas of the workplace where employees are likely to be exposed to noise at or above the Upper Exposure Action Value

2.1 The Effects of Noise at Work

Hearing loss is a normal effect of ageing. This can be occasionally linked to Tinnitus which is a ringing, whistling, buzzing or humming in the ears. It can lead to disturbed sleep and may present problems with social interaction or a risk to safety. Exposure to excessive noise either at work or activities in an employee's own time can have a cumulative effect on an employee's hearing.

A period of prolonged exposure to noise at work can also lead to hearing loss.

2.2 Exposure Action Levels

The Control of Noise at Work Regulations 2005 defines the noise levels at which management action is required. A-weighted noise levels are used to measure environmental noise and exposure to these noise levels are averaged over time (daily or weekly). C-weighted noise levels are used to measure sudden loud noise spikes which employees may be exposed to infrequently. Management action is required to be undertaken as follows:

- **The Lower Exposure Action Values:**
 - a daily or weekly personal noise exposure level of 80 dB (A weighted)or;
 - a peak sound pressure of 135 dB (C weighted).

Risk assessments are to be carried out and noise reduction techniques and control measures investigated. Employees are required to be provided with information, instruction and training about risks and advised on hearing protection that has been made available for use. It is recommended that employees wear the PPE provided, but it is not mandatory.

- **The Upper Exposure Action Values:**
 - a daily or weekly personal noise exposure level of 85 dB (A weighted) and above; or
 - a peak sound pressure of 137dB (C weighted).

Mandatory use of hearing protection is required, with employees provided with regular hearing tests by Occupational Health (see section 3.4). Risk assessments are to be carried out and noise reduction methods are to be put in place to reduce the levels to as low as is reasonably practicable.

- **The Exposure Limit Values:**
 - a daily or weekly personal noise exposure level of 87 dB (A weighted); or
 - a peak sound pressure of 140 dB (C weighted)

Noise reaching the ear of employees must not exceed 87 dB (A) or 140 dB (C), any hearing protection used must be sufficient to lower noise below this level. Noise at or above this limit

will require the employer to take all possible steps to reduce noise levels to below the Exposure Limit Value and ensure that it is not exceeded in the future.

Noise is measured by a noise survey using calibrated equipment. The Health, Safety & Care team can provide advice and support in this process. The HSE diagram attached as Appendix 1 provides examples of a range of activities and their associated noise levels to demonstrate how average noise levels contrast against the Upper Exposure Action Level of 85dB (A).

Employees exposed at or above the lower Exposure Action level must have access to hearing protection. It is important that employees are also provided with information instruction and training on proper use. Employees exposed at or above the Upper Exposure Action Level must be provided with hearing protection and managers must ensure employees wear the protection provided when operating machinery/plant or are in close proximity to machinery/plant. Hearing protection zones must be identified by the use of signage at all entrances and any person entering these areas must wear hearing protection. Noise risk assessments will be reviewed 2 yearly or if there have been significant changes in work practices affecting the noise levels, changes in noise exposure or new control measures have been implemented.

3.0 MANAGEMENT OF NOISE

In accordance with the Council's risk management by risk assessment policy, managers must ensure that suitable controls are implemented where exposure to noise is identified as being a risk. The purpose of controls is to either eliminate noise at source, or where this is not reasonably practicable, reduce noise to a minimum. These should address all of the areas referred to in section 3.1.

3.1 Measures to Control Noise at Work

Examples of good practice to reduce exposure to noise are as follows:

- Design - consider the layout of premises to minimise reflected noise, incorporating methods of sound proofing in construction and/or using sound absorbent panels around equipment;
- Controls - upgrade current machinery/purchase of new quieter machinery, use of enclosures, limiting the time employees spend in noisy work areas and/or introduce/reinforce procedures and systems to reduce levels of exposure e.g. ensuring employees adhere to safe working practices and use hearing protection;
- Maintenance – ensure plant and equipment is properly maintained in line with manufacturer's guidance and ensure a system is in place for reporting and repairing defects;
- Noise surveys & risk assessments –where noise levels make normal conversations difficult, noise may be at high levels. This will be measured by a noise survey. The noise survey and resulting risk assessments will identify if there are further actions required to be undertaken. The results of any survey and risk assessments will be available to all employees;
- Training – ensuring employees are trained on risks to their hearing from noise exposure, on the use and type of hearing protection available and of the need to report defects in plant, machinery or equipment for repair. The training will be clear on whether hearing protection is mandatory or advised.

3.2 Noise Risk Assessments

Noise risk assessments will be carried out in workplaces that managers have identified as being a noisy environment. It is a legal requirement for noise risk assessments to be completed by a person competent in the measurement of noise. Managers are required to make appropriate arrangements to ensure that this is carried out. Each Service must:

- identify all areas where employees are at risk of noise within work areas;
- contact Health, Safety & Care team who will provide advise and support in completing the noise survey within the identified work areas;
- identify who is likely to be at risk from exposure to noise and ensure that relevant employees are made aware of these risks and actions to control risk see 3.3 for training;
- determine a daily personal noise exposure level for relevant employees;

- define control measures to be implemented to reduce the risks from exposure to noise;
- identify whether hearing protection is mandatory/advised and if so what type must be worn;
- identify the need for health surveillance in conjunction with the Council's Occupational Health Provider;
- develop an action plan to set out priorities and targets to eliminate or reduce the risk where there is exposure to noise.

All noise risk assessments will require to be reviewed every 2 years by managers and/or risk assessors if:

- health surveillance shows that employee hearing is being affected or
- Noise control measures have been introduced and you need to determine the impact on employee exposure; or
- The previous assessment does not reflect the current noise within the workplace due to changes in the way work is carried out, or example, new processes introduced or new machinery used; or
- If none of the above has occurred assessments should be checked at least every 2 years.

A written record of the assessment will require to be retained by Services for 25 years.

For further information and guidance a managing noise workflow procedure can be found from the HSE in Appendix 3.

3.3 Instruction and Training

An employee's working practices can make a significant difference to their personal exposure to noise. Training in the correct use of equipment and safe working practices is therefore essential in managing the risks associated with noise at work.

Managers must ensure employees are:

- briefed on relevant risk assessments;
- trained on correct procedures to be applied;
- provided with information on the health risks associated with noise at work;
- advised on how health surveillance programmes will apply to their work;
- advised on when hearing protection is to be used, trained in the correct fitting and general maintenance of the equipment;
- aware of how to report defects in equipment affecting noise levels.

All records of instruction and training provided to employees must be kept by Services for reference purposes. These records must be kept for 25 years. Refresher training will be provided at appropriate frequencies as detailed in the risk assessments.

3.4 Occupational Health Surveillance

The monitoring of employee health is required where the risk assessment process has identified employees who are or who may be at risk from exposure to noise. Services will ensure that local managers have procedures in place for Occupational Health to undertake appropriate health surveillance of these employees. Employees who are regularly exposed to higher levels of noise at work i.e. 85 dB (A) and above, or who already suffer from hearing loss will require to have:

- Recruitment Health Screening**

All employees who have been recruited to work in an area/s where it has been identified that there is a risk from exposure to noise will be subject to audiometric health screening to obtain a base line measurement at commencement of employment. Services must ensure employees are made aware of these risks on induction and the requirement to undergo an audiometric test. Where the audiometric test cannot be carried out at commencement of employment, an employee should have restricted exposure to noise until the screening has been carried out. This should not exceed 2 months from commencement.
- Regular Hearing Checks**

Regular hearing checks must be conducted by the Occupational Health Provider to measure the sensitivity of hearing over a range of sound frequencies. The frequency of surveillance will be dependant on the risk to the employee and the results of hearing assessments and will be determined by the Occupational Health Provider. Employees will be informed of the results of their hearing checks by Occupational Health. The manager will receive a copy of the result of the check with the employee's consent. Results of the hearing check should be discussed between the employee and their manager to ensure management systems are effective. Where there is a change in the noise levels at work, this must be reported to Occupational Health to determine if the Monitoring programme require to be modified.
- Access to a Referral Procedure**

An employee will be able to undergo a hearing check provided by Occupational Health if they report to their manager that they have hearing problems that may be associated to a noise related deafness condition, where the employee has been exposed to noise during their employment with Falkirk Council or a previous employer.
- End of Employment Audiometric Test**

All employees leaving Falkirk Council who are/or have been required to undertake audiometric tests shall be required to have a final audiometric test prior to leaving their employment.

3.5 Machinery and Equipment: Maintenance & Purchasing New Equipment

All equipment used by employees that produces noise may deteriorate over time and increase noise levels. To minimise this risk, managers should ensure that all equipment will be part of a planned maintenance programme as determined by industry standards or by the manufacturer. This is to be supported by a clear procedure to allow employees to report faults in equipment. Records of maintenance must be kept for inspection purposes and archived when equipment is no longer in use for possible future reference. Maintenance records should be kept for 10 years.

Managers will continue to seek alternative equipment or working practices where it is reasonably practicable to reduce noise exposure to the revised exposure standards or below where practicable.

All work equipment that is likely to create excessive noise requires to be risk assessed by a Service to determine the potential risk to an employee/s prior to being purchased taking into account how the equipment is to be used. Information from suppliers must be provided and assessment on noise emission when determining which equipment should be purchased and the manufacturer's information supplied on noise must be taken as indicative values only. Wherever possible the actual measurement of the level of noise should be measured by the Service by a noise survey, to provide evidence of actual noise levels, prior to purchase. The manufacturer must also provide information on maintenance requirements and this should be taken into consideration at purchase and when in use.

3.6 Impact on Vibration

Any equipment that produces noise may also be likely to cause some level of vibration and this must also be considered as a potential risk when the work equipment is held by an employee. The standards identified in "The Control of Vibration at Work Procedure" should be considered and/or applied in conjunction with this Guidance, where appropriate.

3.7 Control of Contractors

All contractors employed by the Council will be required to demonstrate their compliance with The Control of Noise at Work Regulations 2005. This applies to all work activities, from routine servicing to major construction projects. Evidence of risk assessments should be sought where appropriate to ensure that this legislation is being complied with by Contractors.

4.0 ADVICE AND SUPPORT

The Council's Health, Safety & Care Team are available to provide support to Services on issues relating to the control of noise at work if required.

Appendix 1

Example of the range of noise levels at work

The HSE has produced a pictorial example of levels of noise for various work activities to demonstrate the contrast of noise levels that may be present in standard work areas. The arrow on the dial signifies the Upper Exposure Action Level as defined by The Control of Noise at Work Regulations 2005.

