



Public - To be published on the Trust external website

Noise and Vibration Procedure

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Document type: Procedure

Overarching policy: [Health and Safety Policy](#)

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1 Introduction

The Trust has a legal and moral obligation to manage risk. By following this procedure responsible persons will ensure that the health and safety risks from noise and vibration are adequately controlled.

This procedure links to Our Journey To Change as outlined within the Health and Safety Policy.

2 Purpose

Following this policy will help the Trust to comply with its legal obligations:

- Health and Safety at Work etc. Act 1974
- Management of Health and Safety at Work Regulations 1999
- Workplace (Health, Safety and Welfare) Regulations 1992
- The Control of Noise at Work Regulations 2005
- The Control of Vibration at Work Regulations 2005
- Provision and Use of Work Equipment Regulations 1998

3 Who this procedure applies to

This procedure applies to all bank, locum, permanent, fixed term contract employees (including apprentices) who hold a contract of employment or engaged with the Trust, and seconded (including students), volunteers, non-Executive Directors, Governors, and those undertaking research work within TEWV Trust. It also applies to external contractors, (including Private Finance Initiative (PFI)), agency workers, including those within the Gig Economy, limb workers those on honorary contracts, those on work experience and other workers who are assigned to TEWV Trust.

4 Related documents

This procedure describes what you need to do to implement duties under the Trust Health and Safety Policy.

This procedure also refers to:

- ✓ Risk Assessment (H&S) Procedure
- ✓ Control of Contractors Procedure
- ✓ Personal Protective Equipment Procedure

5 Procedure

Where noise and vibration are prevalent a risk assessment should be carried out to assess relevant levels.

5.1 Duties

Managers duties in regard to Noise and Vibration at work:

Noise:

- Assess the risks to your employees from noise at work using the Risk Assessment Template from the [Risk Assessment \(H&S\) Procedure](#).
- Take action to reduce the noise exposure levels that are identified from the risk assessment.
- Provide your employees with hearing protection if you cannot reduce the noise exposure enough by using other methods. Follow the [Personal Protective Equipment \(PPE\) Procedure](#).
- Make sure the legal limits on noise exposure are not exceeded.
- Provide information, instruction, and training.
- Provide an appropriate level of supervision.
- Carry out health surveillance where there is a risk to health.
- Where staff have identified as having a noise related condition or issue, Occupational Health should be contacted before duties are commenced.

Vibration (This includes Whole Body Vibration (WBV) - [see section 5.4.](#)):

- Assess the vibration risk using the Risk Assessment Template from the [Risk Assessment \(H&S\) Procedure](#).
- Put in place appropriate control measures to counter the risk.
- Provide health surveillance where the risk remains high.
- Provide information, instruction, and training.
- Provide an appropriate level of supervision.
- Monitoring of vibration can be done using the log sheet in Appendix 1.
- Where staff have identified as having a vibration related condition or issue, Occupational Health should be contacted before duties are commenced.

Staff duties:

- Report any issues on the incident reporting system and to their Manager/Supervisor.
- Wear any Personal Protective Equipment (PPE) issued to them.



Contractors will be managed by Estates through the Control of Contractors Procedure.

5.2 Noise Exposure Levels

The Control of Noise at Work Regulations 2005 require employers to take specific action at certain action values in relation to noise.

These relate to:

- Noise levels which the employees are exposed to averaged over a working day or week.
- The maximum noise (peak sound pressure) of which the employees are exposed to within a working day.

There are two different exposure levels to be aware of:

Exposure **action** values (EAV) are for noise exposure where specific action should be taken:

- Lower exposure **action** values:
 - Daily or weekly exposure of 80 dB
 - Peak sound pressure of 135 dB.
- Upper exposure **action** values:
 - Daily or weekly exposure of 85 dB
 - Peak sound pressure of 137 dB.

Exposure **limit** values (ELV) represent a high risk and **must not** be exceeded:

- Daily or weekly exposure of 87 dB
- Peak sound pressure of 140 dB.

The HSE has produced a calculator to assist in calculating exposure to noise over both daily and weekly periods. For further information on the calculation, help or any guidance contact the Health and Safety Team.

5.3 Vibration Exposure Levels

The Control of Vibration at Work Regulations 2005 require employers to take specific action when certain action values are reached.

These relate to:

- The vibration at the grip point(s) on the equipment or workpiece.
- The time spent gripping it.

There are two different exposure levels to be aware of:

Exposure **action** values (EAV) are for vibration exposure where specific action should be taken:

- Daily EAV of 2.5 m/s²

Exposure **limit** values (ELV) represent a high risk and **must not** be exceeded:

- Daily ELV of 5 m/s²

The HSE has produced a calculator to assist in calculating exposures for hand-arm vibration. For further information on the calculation, help or any guidance contact the Health and Safety Team.

The exposure values are given in points instead of values which are generally easier to work with:

- Exposure points change simply with time: twice the exposure time, twice the number of points.
- Exposure points can be added together, for example where a worker is exposed to two or more different sources of vibration in a day.
- The exposure action value EAV (2.5 m/s²) is equal to 100 points; the exposure limit value ELV (5 m/s²) is equal to 400 points.

5.4 Whole Body Vibration

Exposure to whole-body vibration (WBV), particularly to large shocks and jolts, is a back-pain health risk for employees who drive mobile machines or other work vehicles over poor surfaces as a main part of their job. This would include the driving of tractors, grasscutters, diggers, or any machines that travel over rough or unmade ground.

If applicable this should be included within the Noise and Vibration Risk Assessment.

5.5 Noise and Vibration Risk Assessment Process

A noise and vibration risk assessment should include the work task being undertaken, consider the **hierarchy of control** and the following questions:

See [Risk Assessment \(H&S\) Procedure](#) for further information on the hierarchy of control.

Source

- Can the source of either noise or vibration be eliminated?
- Can silencers/baffles/dampeners be provided/fitted in regard to noise?
- Can anti vibration pads be provided to reduce noise?
- Can selection of machinery be looked at in regard to a positive purchasing policy?
- Can the mechanisation be looked at in regard to vibration?
- What is the maintenance and lubrication schedules for the machines and do these need to be increased?

Pathway

- Is insulation required for both noise and vibration?
- Are isolation/absorption or enclosure (acoustic havens) required in regard to noise?
- Are warm handles available on the machinery for vibration, if not are gloves provided to keep hands warm and dry?
- Are safe systems of work in place?

Destination

- Is health surveillance in place for both noise and vibration?
- Are acoustic havens available?
- Is Information, instruction, training, and supervision in place?
- Can the time exposure be reduced?
- Can jobs be rotated?
- Provide PPE (as a last control measure after all other control measures have been considered) e.g., ear protection, gloves for warm/dry hands when using vibrating equipment.



Consideration should also be given and documented on the risk assessment in regard to young workers and new and expectant mothers/people. These should also be covered through their own individual risk assessments as to whether they should be undertaking the task.

For further guidance and advice contact the Health, Safety & Security team on tewv.hss@nhs.net

5.6 Technical Control Measures

Technical Control measures to consider when undertaking a noise and vibration risk assessment are:

- Using quieter equipment or a different, quieter process.
- Engineering/technical controls to reduce, at source, the noise produced by a machine or process.
- Using screens, barriers, enclosures, and absorbent materials to reduce the noise on its path to the people exposed.
- Designing and laying out the workplace to create quiet workstations.
- Improved working techniques to reduce noise levels.
- Limiting the time people spend in noisy areas.
- A low noise purchasing policy for machinery and equipment.
- Proper and regular maintenance of machinery and equipment that takes account of noise.

5.7 Personal Protective Equipment

As per the hierarchy of control for management of any risk, personal protective equipment is the last line of defence. It should only be considered after all other control measures have been exhausted. Please see the Personal Protective Equipment (PPE) Procedure for further guidance.

In regard to noise:

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.



Hearing protection should not be used as an alternative to controlling noise by technical and organisational means.

In regard to vibration:

- Gloves for warm/dry hands when using vibrating equipment.



It is important to note that **no gloves are anti-vibration**. Gloves would only be worn as a control measure to keep hands warm and dry; this is due to the risk of Hand Arm Vibration (HAV) increasing if hands are wet and cold.



If a staff member has a religious practice that requires head coverings that interfere with standard PPE, then appropriate PPE should be sourced, contact the Health and Safety Team for advice where necessary.

5.8 Positive Purchasing Policies

In regard to positive purchasing policies and buying equipment, when you buy work equipment you should expect your supplier to provide the following in regard to vibration:

- Warning of any vibration-related risks from using the equipment.
- Information on safe use and, where necessary, training requirements.
- Information on how to maintain the equipment.
- Information on the vibration emissions of the equipment.

5.9 Health Surveillance

Health surveillance (hearing checks) for noise will be undertaken via the Trust's Occupational Health provider in accordance with the findings of the risk assessment. Where noise monitoring data shows staff may be regularly exposed to the upper exposure action value (daily or weekly average noise exposure of 85dB), or where an individual's risk assessment has identified this as a requirement (i.e., already suffer hearing loss or particular sensitivity to hearing damage).

Vibration and HAV

Staged health surveillance can be provided for workers who, despite actions to control vibration risk, are likely to be regularly exposed above the Exposure Action Value or are considered to be at risk for any other reason.

The stages for health surveillance would be considered as part of the risk assessment process:

- **Tier 1:** initial questionnaire used for people whose work involves exposure to vibration and may need to be referred to Tier 3.
- **Tier 2:** annual questionnaire used for workers exposed to vibration risks to determine need to be referred to Tier 3.
- **Tier 3:** HAV health assessment by a qualified person (e.g., Occupational Health) and will determine need to be referred to Tier 4.
- **Tier 4:** formal diagnosis given by a doctor qualified in occupational health. The doctor will advise on the employee's fitness for work.
- **Tier 5 (Optional):** involves referral for certain tests for HAV. The results may help the doctor assess fitness for work.



Vibration Log Sheets ([Appendix 1](#)) completed for staff where necessary and logged with Supervisor/Manager for monitoring and action where required.

5.10 Referral to Occupational Health

Where there is concern over noise and vibration affecting a staff member's health a referral should be made to Occupational Health as per the normal Occupational Health referral process.

5.11 Training

Staff should be trained to use any work equipment that produces noise and vibration.

6 Health, Safety and Security Team

The Health, Safety and Security Team (which also includes a Local Security Management Specialist) provides advice and support to all staff and managers around the management of risk.

7 Definitions

Term	Definition
Noise at Work	HSE: <i>“Noise at work can cause hearing damage that is permanent and disabling. This can be hearing loss that is gradual because of exposure to noise over time, but also damage caused by sudden, extremely loud noises. The damage is disabling as it can stop people being able to understand speech, keep up with conversations or use the telephone. Hearing loss is not the only problem. People may develop tinnitus (ringing, whistling, buzzing or humming in the ears), a distressing condition which can lead to disturbed sleep.”</i>
Hand Arm Vibration	HSE: <i>“Hand-arm vibration is vibration transmitted into workers’ hands and arms. This can come from use of hand-held power tools (such as grinders or road breakers), hand-guided equipment (such as powered lawnmowers or pedestrian controlled floor saws) or by holding materials being worked by hand-fed machines (such as pedestal grinders or forge hammers).”</i>
Whole Body Vibration	HSE: <i>“Whole-body vibration (WBV) is transmitted through the seat or feet of employees who drive mobile machines, or other work vehicles, over rough and uneven surfaces as a main part of their job.”</i>
Hierarchy of Control	HSE: <i>“Risks should be reduced to the lowest reasonably practicable level by taking preventative measures, in order of priority.”</i>

8 How this procedure will be implemented

<ul style="list-style-type: none"> This procedure will be published on the Trust’s intranet.
<ul style="list-style-type: none"> Line managers will disseminate this procedure to all Trust employees through a line management briefing.

- Line managers to ensure that the appropriate staff are booked on to the courses identified in the below training needs analysis and the examination (where applicable) is successfully completed.

8.1 Training needs analysis

Staff/Professional Group	Type of Training	Duration	Frequency of Training
<p>Estates (i.e. gardeners, carpenters, engineers etc.)</p> <p>Identified through a risk assessment done by the Service and also by checking the technical specifications for the equipment being used to determine inclusion and whether training would be required.</p>	<ul style="list-style-type: none"> Local Induction Toolbox talks 	<ul style="list-style-type: none"> To be determined by the Service <p>To be determined by the Service as part of the risk assessment Process</p>	<ul style="list-style-type: none"> On start of job. <p>To be determined by the Service as part of the risk assessment Process</p>
<p>Hotel Services (i.e. Housekeepers / Porters etc.)</p> <p>Identified through a risk assessment done by the Service and also by checking the technical specifications for the equipment being used to determine inclusion and whether training would be required.</p>	<ul style="list-style-type: none"> Local Induction Toolbox talks 	<ul style="list-style-type: none"> To be determined by the Service <p>To be determined by the Service as part of the risk assessment Process</p>	<ul style="list-style-type: none"> On start of job. <p>To be determined by the Service as part of the risk assessment Process</p>

9 How the implementation of this procedure will be monitored

Number	Auditable Standard/Key Performance Indicators	Frequency/Method/Person Responsible	Where results and any Associate Action Plan will be reported to, implemented and monitored; (this will usually be via the relevant Governance Group).
1	Compliance with the legal requirements outlined within the Management of Health and Safety at Work Regulations 1999. <i>NB. There are 14 questions listed in the audit template that are assessed for compliance.</i>	<p>Frequency: Annual rolling audit programme.</p> <p>Method: Risk Assessment audits will be carried for a sample of all teams utilising standard audit templates via an internet-based audit platform (iAuditor). Results are collated and discussed at Health, Safety, Security and Fire Group (HSSF GROUP) with quarterly report to be submitted to Quality Assurance Committee (QAC).</p> <p>Responsible: Undertaken by members of the Health and Safety Team as directed by the Head of Health, Safety and Security.</p>	Implementation and monitoring are directed by Quality Assurance Committee (QAC) and devolved to the HSSF Group.

10 References

- ✓ Health and Safety at Work etc. Act 1974
- ✓ The Management of Health and Safety at Work Regulations 1999
- ✓ The Control of Noise at Work Regulations 2005
- ✓ The Control of Vibration at Work Regulations 2005
- ✓ Provision and Use of Work Equipment Regulations 1998 (PUWER)
- ✓ INDG362 Noise at Work A Brief Guide to Controlling the Risks
- ✓ INDG175 Hand-arm Vibration at Work A Brief Guide

11 Document control (external)

To be recorded on the policy register by Policy Coordinator

Date of approval	24 January 2024
Next review date	24 January 2027
This document replaces	HS-0001-016-v1
This document was approved by	Health, Safety, Security and Fire Group
This document was approved	24 January 2024
This document was ratified by	EFM DMT
This document was ratified	15 January 2024
An equality analysis was completed on this policy on	31 October 2023
Document type	Public
FOI Clause (Private documents only)	n/a

Change record

Version	Date	Amendment details	Status
v1	11 Feb 2021	New document to cover Noise and Vibration in the workplace. Note - published 01/06/2021.	Withdrawn
V2	24 Jan 2024	Full review: <ul style="list-style-type: none"> • Clarified and updated the wording. • Removed Noise and Vibration Risk assessment and provided guidance to follow the Risk Assessment (H&S) procedure. • Added section 5.4. on Whole Body Vibration 	Published

Appendix 1 –Vibration Log Sheet

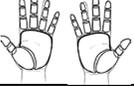
An MS Word Version of this risk assessment form is available on the T-Drive located here (copy file path and paste into file explorer pathway):
<T:\Intranet Published Documents\Working here\Health and Safety\Health and safety toolkit\Forms and templates>

Name:

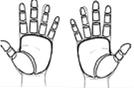
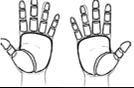
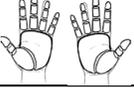
Week Commencing:

Symptoms Key: **P** = Pain, **N/T** = Numbness / Tingling, **G** = Grip Strength.
 Please use the comment section at the end of the form to add further symptoms.

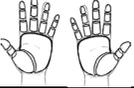
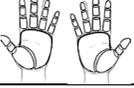
Monday

	LOCATION	TASK COMPLETED	MACHINERY USED	TIME (MINS)	PRE/POST CHECKS	Weather			Symptoms			AREA OF HANDS EFFECTED
						Hot	Cold	Wet	P	N/T	G	
1			<i>Asset No.</i>									
2												
3												
4												

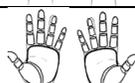
Tuesday

	LOCATION	TASK COMPLETED	MACHINERY USED	TIME (MINS)	PRE/POST CHECKS	Weather			Symptoms			AREA EFFECTED
						WEATHER			SYMPTOMS			
						Hot	Cold	Wet	P	N/T	G	
1			<i>Asset No.</i>									
2												
3												
4												

Wednesday

	LOCATION	TASK COMPLETED	MACHINERY USED	TIME (MINS)	PRE/POST CHECKS	Weather			Symptoms			AREA EFFECTED
						WEATHER			SYMPTOMS			
						Hot	Cold	Wet	P	N/T	G	
1			<i>Asset No.</i>									
2												
3												
4												

Thursday

	LOCATION	TASK COMPLETED	MACHINERY USED	TIME (MINS)	PRE/POST CHECKS	Weather			Symptoms			AREA EFFECTED
						WEATHER			SYMPTOMS			
						Hot	Cold	Wet	P	N/T	G	
1			<i>Asset No.</i>									
2												
3												
4												

Friday

	LOCATION	TASK COMPLETED	MACHINERY USED	TIME (MINS)	PRE/POST CHECKS	Weather			Symptoms			AREA EFFECTED
						WEATHER			SYMPTOMS			
						Hot	Cold	Wet	P	N/T	G	
1			<i>Asset No.</i>									
2												
3												
4												

Comments:

Appendix 2 - Equality Analysis Screening Form

Please note: The Equality Analysis Policy and Equality Analysis Guidance can be found on the policy pages of the intranet

Section 1	Scope
Name of service area/directorate/department	Health & Safety, EFM
Title	Noise and Vibration Procedure
Type	Procedure
Geographical area covered	Trust wide
Aims and objectives	<p>The objectives of this procedure are to:</p> <ul style="list-style-type: none"> Comply at all times with the Health and Safety at Work etc. Act 1974 etc., the Management of Health and Safety at Work Regulations 1999, The Control of Noise at Work Regulations 2005, The Control of Vibration at Work Regulations 2005, and all other relevant statutory provisions. Manage health and safety effectively to improve the quality of patient care, visitors and working conditions of staff and others.
Start date of Equality Analysis Screening	23 October 2023
End date of Equality Analysis Screening	31 October 2023

Section 2	Impacts
Who does the Policy, Service, Function, Strategy, Code of practice, Guidance, Project or Business plan benefit?	All staff, patients, contractors and visitors and the general community.
Will the Policy, Service, Function, Strategy, Code of practice, Guidance, Project or	<ul style="list-style-type: none"> Race (including Gypsy and Traveller) NO Disability (includes physical, learning, mental health, sensory and medical disabilities) NO

<p>Business plan impact negatively on any of the protected characteristic groups?</p>	<ul style="list-style-type: none"> • Sex (Men, women and gender neutral etc.) NO • Gender reassignment (Transgender and gender identity) NO • Sexual Orientation (Lesbian, Gay, Bisexual, Heterosexual, Pansexual and Asexual etc.) NO • Age (includes, young people, older people – people of all ages) NO • Religion or Belief (includes faith groups, atheism and philosophical beliefs) NO • Pregnancy and Maternity (includes pregnancy, women who are breastfeeding and women on maternity leave) NO • Marriage and Civil Partnership (includes opposite and same sex couples who are married or civil partners) NO • Armed Forces (includes serving armed forces personnel, reservists, veterans and their families) NO
<p>Describe any negative impacts</p>	<p>There will be times when health and safety has to take priority and this may have an impact on a person's protected characteristics. TEWV would however always try and mitigate as much as possible any negative impact whilst ensuring health and safety legislation is followed.</p>
<p>Describe any positive impacts</p>	<p>Procedure is in place to reduce risk to all staff, patients, visitors, contractors etc.</p>

<p>Section 3</p>	<p>Research and involvement</p>
<p>What sources of information have you considered? (e.g. legislation, codes of practice, best practice, nice guidelines, CQC reports or feedback etc.)</p>	<p>Health & Safety at Work Act 1974 Management of Health and Safety at Work Regulations 1999 (MHSWR) The Control of Noise at Work Regulations 2005 The Control of Vibration at Work Regulations 2005</p>
<p>Have you engaged or consulted with service users, carers, staff and other stakeholders including people from the protected groups?</p>	<p>Yes</p>

If you answered Yes above, describe the engagement and involvement that has taken place	Programme of visits and audits have been undertaken where concerns have been discussed and documented. These have been considered while reviewing the procedure.
If you answered No above, describe future plans that you may have to engage and involve people from different groups	

Section 4	Training needs
As part of this equality analysis have any training needs/service needs been identified?	No
Describe any training needs for Trust staff	N/A
Describe any training needs for patients	N/A
Describe any training needs for contractors or other outside agencies	N/A

Check the information you have provided and ensure additional evidence can be provided if asked.

Appendix 3 – Approval checklist

	Title of document being reviewed:	Yes / No / Not applicable	Comments
1.	Title		
	Is the title clear and unambiguous?	Yes	
	Is it clear whether the document is a guideline, policy, protocol or standard?	Yes	
2.	Rationale		
	Are reasons for development of the document stated?	Yes	
3.	Development Process		
	Are people involved in the development identified?	Yes	
	Has relevant expertise has been sought/used?	Yes	
	Is there evidence of consultation with stakeholders and users?	Yes	
	Have any related documents or documents that are impacted by this change been identified and updated?	Yes	
4.	Content		
	Is the objective of the document clear?	Yes	
	Is the target population clear and unambiguous?	Yes	
	Are the intended outcomes described?	Yes	
	Are the statements clear and unambiguous?	Yes	
5.	Evidence Base		
	Is the type of evidence to support the document identified explicitly?	Yes	
	Are key references cited?	Yes	
	Are supporting documents referenced?	Yes	
6.	Training		
	Have training needs been considered?	Yes	
	Are training needs included in the document?	Yes	
7.	Implementation and monitoring		

	Title of document being reviewed:	Yes / No / Not applicable	Comments
	Does the document identify how it will be implemented and monitored?	Yes	
8.	Equality analysis		
	Has an equality analysis been completed for the document?	Yes	
	Have Equality and Diversity reviewed and approved the equality analysis?	Yes	Approved 31 October 2023
9.	Approval		
	Does the document identify which committee/group will approve it?	Yes	
10.	Publication		
	Has the policy been reviewed for harm?	Yes	
	Does the document identify whether it is private or public?	Yes	Public.
	If private, does the document identify which clause of the Freedom of Information Act 2000 applies?	Yes	