

# CAERPHILLY COUNTY BOROUGH COUNCIL

## CONTROL OF VIBRATION EXPOSURE AT WORK POLICY

**July 2009**  
Issue 1

Corporate Health and Safety Unit document Reference Number: CHSU15

<b>SECTION</b>		<b>PAGE NUMBER</b>
SECTION 1	<u>INTRODUCTION</u>	3
SECTION 2	<u>POLICY STATEMENT</u>	3
SECTION 3	<u>SCOPE</u>	3
SECTION 4	<u>DEFINITIONS</u>	4
SECTION 5	<u>LEGISLATION</u>	5
SECTION 6	<u>RESPONSIBILITIES</u>	5

This publication is available in Welsh, other languages or formats on request.  
Mae'r cyhoeddiad hwn ar gael yn Gymraeg ac mewn ieithiodd neu fformatau eriall ar gais.

## NOTE

Wherever the designation “manager” is used throughout this policy, it is taken to mean Head of Service, Head Teacher, Line Manager, Supervisor and the Officer in charge or anyone who has responsibilities for employees in the course of their work.

### 1 INTRODUCTION

- 1.1. This document sets out the policy, and outlines the protective and preventative measures to be implemented by Caerphilly County Borough Council (the Authority), to ensure the health, safety and welfare of its employees in relation to the control of hand-arm (HAV) and whole body vibration (WBV) while at work.
- 1.2. This policy must be read in conjunction with the Corporate Management Arrangements for the Control of Vibration Exposure at Work document that sets out the arrangements and responsibilities for managing the exposure of employees to vibration while undertaking work activities for the Authority.

### 2 POLICY STATEMENT

- 2.1. The Authority recognises that its employees are its most valuable resource in delivering high quality services to the community, and will take all practical steps to ensure the health and safety of the its employees, as well as contractors and visitors to and users of Authority premises and work equipment by controlling their exposure to vibration from work equipment and processes.
- 2.2. The Authority recognises there are inherent risks with some work activities which put its employees at greater risk of exposure to work related hand / arm and whole body vibration. The Authority will therefore assess the risks associated with work activities that present a risk associated with vibration and consider alternative safer systems of work where reasonably practicable that eliminate the risk at source, or reduce the extent and duration of exposure, so far as is reasonably practicable.
- 2.3. Where control of vibration is necessary, the effective control of these risks will be achieved through the management systems as set out in this policy, and the provision of appropriate training, information, instruction and supervision. To be effective this policy requires the full co-operation of management and employees at all levels.
- 2.4. The Authority accepts it has specific duties under various health and safety legislation including those specified in Section 5.

### 3 SCOPE

- 3.1. This policy has been agreed with the Trade Unions and applies to all employees.
- 3.2. This policy will be reviewed at least every 2 years to ensure it is in line with current legislation.
- 3.3. The effective date of the policy is

## 4 DEFINITIONS

4.1. For the purpose of this policy the following definitions are to be used and applied throughout the policy and the supporting Corporate Management Arrangements document:-

- **‘Vibration’** - mechanical vibration produced by a piece of machinery or equipment, or in a vehicle as a result of its operation (particularly on uneven ground);
- **‘hand-arm vibration’ (HAV)** - mechanical vibration transmitted into the hands and arms, typically as a result of the use of vibrating hand held such as power tools and road breakers, and hand-guided equipment such as powered lawnmowers, and strimmers. Exposure may also arise from holding materials being processed by machines, such as during the use of pedestal grinders.
- **‘whole-body vibration’ (WBV)** - mechanical vibration that is transmitted into the whole body, when seated or standing, through the supporting surface (usually a seat or the floor) during a work activity. For example when driving or riding on a vehicle along an unmade road, operating earthmoving machines or standing on a structure attached to a large, powerful, fixed machine which is impacting or vibrating.
- **‘daily exposure’** - the quantity of mechanical vibration to which a worker is exposed during a working day, normalised to an 8-hour reference period, which takes into account of the magnitude and duration of vibration.
- **‘daily exposure limit value’** - the maximum amount of vibration an employee may be exposed to on any single working day, averaged over an 8-hour period:-
  - i. For hand arm vibration this has been set at  $5 \text{ m/s}^2 \text{ A (8)}$
  - ii. For whole body vibration this has been set at  $1.15 \text{ m/s}^2 \text{ A (8)}$
- **daily exposure action value** - the level of daily exposure to vibration above which there is a requirement to take action to reduce exposure, averaged over an 8-hour period:-
  - i. For hand –arm vibration this has been set at  $2.5 \text{ m/s}^2 \text{ A (8)}$
  - ii. For whole body vibration this has been set at  $0.15 \text{ m/s}^2 \text{ A (8)}$
- **$\text{m/s}^2 \text{ A(8)}$**  - the unit of measurement for the total exposure to vibration, averaged over an 8 hour period.
- **$\text{m/s}^2 \text{ A(8)}_{\text{week}}$**  - the unit of measurement for the total exposure to vibration occurring within a seven-day period, averaged over a period of five 8-hour days (40 hours). This averaging period relates to occasional exposures above the exposure action value, eg activities of high exposure but low frequency, such as during emergency work activities.
- **‘working day’** - a daily working period, irrespective of the time of day when it begins and ends, and of whether it begins or ends on the same calendar day.
- **‘risk assessment’** - all assessments relating to the identification and assessment of hazards and risks associated with vibration and of the effectiveness of risk-control measures.

- **'equipment'** - includes all hand tools, mobile and fixed plant /machinery and vehicles with the potential to cause harm through vibration as a direct or indirect result of its use.
- a **'survey'** - a visit to an Authority premises to conduct vibration measurement on selected 'equipment'.
- **'employees'**- all persons employed by the Authority conducting any activity relating to the Authority's undertaking whether for payment or otherwise (eg. volunteers and those on work experience placements.)
- **'competent person'** refers to a person with the appropriate knowledge, theoretical and practical understanding, training, experience and personal qualities that make them qualified to make informed decisions regarding the control of vibration exposure in connection with work activities.
- **'contractor'** - any person (or persons) who is not an 'employee' but who is authorised by the Authority to carry out work on its behalf.

## 5. LEGISLATION

- 5.1. This policy, along with its supporting procedures, is designed to ensure the Authority meets its legal obligations under the following legislation:-
- The Health and Safety at Work etc. Act 1974
  - The Control of Vibration at Work Regulations 2005
  - The Provision and Use of Work Equipment Regulations 1998 (PUWER) (as amended)
  - The Supply of Machinery (Safety) Regulations 1992 (as amended)
  - The Management of Health and Safety at Work Regulations 1999
  - The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)

## 6. RESPONSIBILITIES

### 6.1. The Chief Executive Officer will:

- 6.1.1. Be ultimately responsible for ensuring compliance with this policy within Caerphilly County Borough Council.

### 6.2. Directors will:

- 6.2.1 Be responsible for ensuring the effective implementation of this Corporate Policy, the Corporate Management Arrangements, and associated Directorate policies and local management arrangements within their service areas;
- 6.2.2 Ensure that appropriate resources are made available for the effective operation of this policy, including training.

### 6.3. Managers with responsibilities for employees will:

- 6.3.1 Identify all work activities and equipment where potential exposure to hand-arm or whole body vibration by employees could be realised, particularly those that cause tingling or numbness in the hands during or after use and those listed in Appendix 1;

- 6.3.2 Appoint a 'competent person' (as defined in Section 4) to assist them in the effective elimination or control of exposure to vibration that may otherwise put employees' health at risk, unless they themselves fulfil the definition of a competent person.
- 6.3.3 Undertake, or ensure that, a suitable and sufficient risk assessment is undertaken for employees exposed to vibration, and ensure the findings are communicated to all employees to whom the assessment concerns. Please refer to the Corporate Risk Assessment Policy for information regarding the conducting and recording of suitable risk assessments;
- 6.3.4 Take action to prevent exposure to vibration, wherever it is reasonably practicable to do so. Where this is not possible, ensure that vibration exposure is reduced to the minimum level achievable;
- 6.3.5 Ensure that if employees are likely to be exposed to vibration at, or above the relevant daily exposure action value (as defined in Section 4) unless appropriate control measures are in place that exposure is eliminated at source, or where this is not reasonably practicable, reduced as far as is reasonably practicable to a level below the relevant exposure action value (at least below the relevant daily exposure action value). This will require a programme of control measures, as set out in the supporting Corporate Management Arrangements for the Control of Vibration Exposure at Work;
- 6.3.6 Ensure that where employees are likely to be exposed to vibration at, or above the relevant daily exposure action value during the course of their work activities that relevant information (such as that listed in Section 2) is made available to exposed employees, and that they receive suitable and sufficient training regarding the risks associated with the use of vibrating equipment or processes (eg. handling of materials being processed that transmit vibration to the employee) and the control measures to be implemented to minimise the associated risks;
- 6.3.7 Ensure the use of vibrating equipment usage logs as an aid to assessing exposure (see Appendix 3);
- 6.3.8 Ensure that employees are not exposed to vibration above the relevant daily exposure limit value, defined in Section 4;
- 6.3.9 Ensure vibration magnitude reduction and ergonomic design features have been considered when purchasing or hiring equipment or machinery, and data regarding vibration magnitude associated with the normal use of the equipment is obtained from the supplier/manufacturer;
- 6.3.10 Ensure that anything provided for the purposes of this policy is properly used and maintained in an efficient state, in efficient working order and in good repair. This includes the provision of planned preventative maintenance of vibrating hand tools and processing equipment, including the sharpening of cutting tools and lubrication of moving components as and where required and in line with manufacturers guidelines;
- 6.3.11 Ensure equipment identified as, or suspected of, being faulty is taken out of use for service, repair or replacement as necessary;
- 6.3.12 Ensure that, where possible, that the temperature within the work area in which vibrating hand tools are used offers reasonable comfort to maintain good blood flow to the operators' fingers. Where work involving the use of vibrating hand tools and plant is undertaken outdoors during winter months, ensure that suitable

gloves are provided to protect the workers' hands from exposure to cold temperatures and to help maintain good blood flow to reduce the risk of potential health effects associated with hand-arm vibration (particularly vibration white finger);

- 6.3.13 Ensure that employees are provided with sufficient training and information on how to select the most appropriate tool and accessory/attachment (where available) and how to use and maintain the work equipment to minimise the risk of greater vibration magnitude attributable to improper use or poor maintenance and wear to which they would otherwise be exposed;
- 6.3.14 Ensure that employees are provided with sufficient training and information regarding the measures to help reduce the risks of developing health conditions associated with exposure to hand arm vibration, including restricting the duration of vibration exposure, methods of working that reduce vibration exposure, ergonomic attachments to work equipment that can help to reduce vibration magnitude or need to grip equipment tightly, smoking cessation and importance of keeping hands warm to maintain good blood flow;
- 6.3.15 Ensure that all new employees, or those changing jobs, who will be exposed to vibration for the first time, are given suitable information about the hazards of vibration exposure, the potential health symptoms associated with vibration exposure, and the potential long-term health consequences of failing to promptly report symptoms of HAVS;
- 6.3.16 Ensure that all new employees, or those changing jobs, that will be exposed to hand arm vibration due to their work for the first time, are issued with the initial screening for HAVS questionnaire (see Appendix 6), and that employees complete and send them to Occupational Health for screening;
- 6.3.17 Ensure that any employee indicating any previous exposure to vibration or symptoms associated with HAVS that they suspect may not have been referred to within an initial medical screening questionnaire for hand arm vibration is referred to Occupational Health by completion and submission of an OH1 form together with a copy of a new medical screening questionnaire;
- 6.3.18 Ensure, where possible, that employees diagnosed with any significant medical condition resulting from exposure to vibration that may suffer further pain or discomfort if further exposed are assigned to activities where there is no further exposure, and ensure that assessments and compliance measures are reviewed accordingly. Ensure that any employee with any diagnosed condition resulting from exposure to vibration is also provided with information and advice regarding future surveillance requirements;
- 6.3.19 Prohibit employees suspected of having pre-existing health symptoms associated with exposure of hand-arm vibration from commencing work activities that expose them to further vibration until deemed fit to recommence such work by Occupational Health;
- 6.3.20 Ensure that any work restrictions recommended by an Occupational Health specialist (for example regarding an employees' future work activities, exposure to vibration or work patterns) are fully implemented;
- 6.3.21 Ensure that each employee exposed to vibration in connection with their work activities is issued with a copy of the annual medical screening questionnaire (see Appendix 7) on at least an annual basis, or sooner if they report any health symptoms associated with exposure to vibration or as recommended by an Occupational Health specialist, and that these questionnaires are completed and sent to Occupational Health for screening;

- 6.3.22 Ensure that employees have been made aware of the reporting procedures for raising concerns relating to the use and handling of, and symptoms associated with, vibrating equipment;
- 6.3.23 Ensure employees understand the provisions for support the Authority has in place, following referral to Occupational Health;
- 6.3.24 Maintain confidentiality regarding any information received from Occupational Health regarding the significant findings of any health surveillance relating to employees;
- 6.3.25 Ensure arrangements are in place for the upkeep of all relevant records relating to equipment maintenance and Vibrating Equipment Usage Logs (see Appendix 3);
- 6.3.25 Ensure this policy is communicated to all employees under their managerial control;
- 6.3.26 Ensure employees comply with this policy and associated Directorate arrangements for control of hand-arm and whole body vibration derived from this policy;
- 6.3.27 Where required, request advice, support and information from Directorate Health and Safety Officers.

#### **6.4. The Competent Person will:**

- 6.4.1. Complete a training course in vibration exposure management, including common causes of excess vibration magnitude and exposure, practical measures to reduce exposure, and methods of measuring daily exposure and use of the 'ready reckoner' in Appendix 4 of the supporting Corporate Management Arrangements document, completion of the vibrating equipment usage log, and the HSE's electronic vibration exposure calculator tool;
- 6.4.2. Ensure a suitable and sufficient risk assessment is carried out regarding the exposure of Authority employees to vibration while at work, and that the findings are reported to the relevant Line Manager, relevant Directorate Health and Safety Officer and, where there is cause for concern, the Corporate Health and Safety Unit;
- 6.4.3. Make recommendations in their assessment for, where required, engineering or control methods to eliminate or reduce exposure to vibration to the lowest practicable levels;
- 6.4.4. Make recommendations in their assessment on the maximum duration of exposure to vibration to avoid employees' exposure exceeding relevant exposure limits and regarding other practical risk-reduction measures that may be suitable.

#### **6.5. Each employee of the Authority will:**

- 6.5.1. Comply with any working procedure and precautionary or control measures, and use any work equipment provided by the Authority to minimise the risk associated with exposure to hand-arm or whole body vibration;
- 6.5.2. After training and being provided with relevant information, understand the affects of vibration to health and learn to recognise the symptoms of hand-arm and whole body vibration, and inform their line manager or Directorate Health and Safety Officer of any health and safety concerns regarding their work activities or those of work colleagues;



- 6.5.3. Inform their line manager or appropriate Officer promptly of any symptoms or medical conditions so they may be referred to occupational health for assessment;
- 6.5.4. At the request of their line manager, attend health surveillance appointments with Occupational Health during work hours;
- 6.5.5. Understand their responsibilities in relation to this policy and any supporting documentation;
- 6.5.6. Check tools prior to use to check that cutting tools are sharp, equipment is appropriately lubricated where necessary, and that all necessary ergonomic or vibration reduction attachments are fitted and are correctly used;
- 6.5.7. Discontinue use with any vibrating handtools that they have reason to believe requires maintenance or repair or has damaged attachments or other features intended to reduce their exposure to harmful vibration magnitude.

**6.6. The Corporate Health and Safety Unit will:**

- 6.6.1. Ensure the control of vibration at work policy is reviewed at least annually to ensure it is in line with current legislation;
- 6.6.2. Provide advice and information on legislation or guidance relating to control of vibration at work;
- 6.6.3. Liaise with Directorate Health and Safety Officers and the Corporate Health and Safety Unit (CHSU) to ensure that confirmed cases of carpal tunnel syndrome or HAVS arising from the use of vibrating handtools, or handling of material being processed that transmits vibration are reported appropriately in accordance with the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995;
- 6.6.4. Work with Occupational Health and Procurement to engage a contractor/consultant to assist the Authority in complying with the Control of Vibration Regulations.
- 6.6.5. Support Occupational Health to ensure that any Contractor/Consultant engaged to assist the Authority in complying with the Control of Vibration at Work Regulations is monitored and managed.
- 6.6.6. Audit compliance against this policy.

**6.7. The Directorate Health and Safety Officer will:**

- 6.7.1. Ensure that any necessary Directorate arrangements are developed in accordance with this policy;
- 6.7.2. Ensure local arrangements are in place for the checking of the vibrating equipment by employees before any equipment is used, including out of hours working where applicable;
- 6.7.3. Where appropriate investigate and record findings of any incidents together with the relevant manager(s) and employees;
- 6.7.4. Liaise with the Occupational Health Department to ensure that confirmed cases of carpal tunnel syndrome or HAVS arising from the use of vibrating handtools, or handling of material being processed that transmits vibration are reported appropriately in accordance with the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995

- 6.7.5. Where appropriate, provide advice and support to managers with regards to carrying out the risk assessment of work activities that cause exposure to hand-arm or whole body vibration;
- 6.7.6. Where appropriate assist managers in the interpretation of vibration monitoring reports;
- 6.7.7. Ensure the communication of the policy and any Directorate arrangements to all managers within their Directorate;
- 6.7.8. Monitor the effective implementation of this Policy and associated Directorate arrangements;
- 6.7.9. Ensure the timely reporting of any incidents/ accidents and confirmed diagnosed cases of hand-arm or whole body vibration, for those employees assessed by Occupational Health or other medically competent person (GP or specialist), to the Health and Safety Executive (HSE);
- 6.7.10. On request, provide information or advice regarding the use of any equipment where measured vibration levels do not meet legal requirements assigned.

**6.8. Procurement will:**

- 6.8.1 Ensure the purchasing policy reflects the selection of appropriate equipment, ie. takes into account vibration levels, noise, ergonomics and efficiency to enable compliance with specific legal or safe usage requirements;
- 6.8.2 Ensure that the equipment or machinery supplied meets the legal requirements for its intended use, ie conforms to relevant British or European safety standards, is CE marked, and is of low vibration during normal use by design;
- 6.8.3 Arrange for suppliers to demonstrate and allow the Authority to trial any equipment, plant or machinery as part of the pre-selection and procurement process where appropriate;
- 6.8.4 Ensure a competent person (as defined in Section 4) is consulted regarding any issues relating to equipment, plant and machinery intended for use that will cause those using the equipment to be exposed to vibration;
- 6.8.5 Ensure any external occupational health service provider, if appointed to provide medical screening on behalf of the Authority, is suitably qualified in the screening and diagnosis of hand arm and whole body vibration exposure;
- 6.8.6 Ensure that during the procurement of any external occupational health services the Corporate Health and Safety Unit and the Authority's own Occupational Health department are informed and involved in the selection of any contractor/consultant and the setting up of any proposed screening programmes;
- 6.8.7 Ensure that the contract with any external occupational health service provider requires the Authority's own Occupational Health department to be provided with details of employees' medical conditions and of any medical recommendations given to Authority employees.

**6.9. Occupational Health will:**

- 6.9.1 Work with Procurement and the Corporate Health and Safety Unit to engage a contractor/consultant to assist the Authority in complying with the Control of Vibration Regulations.

- 6.9.2 Ensure that any Contractor/Consultant engaged to assist the Authority in complying with the Control of Vibration at Work Regulations is monitored and managed.
- 6.9.3 Liaise with the Consultant/Contractor to ensure that vibration risk is managed in accordance with legal requirements and any findings from vibration measurements/health surveillance are followed up.
- 6.9.4 Maintain health records of any employees relating to vibration. These records must be kept for at least forty years
- 6.9.5 If requested provide an enforcing authority with copies of health records, and on reasonable notice, allow an employee access to their personal health records.
- 6.9.6 Liaise with Directorate Health and Safety Officers and the Corporate Health and Safety Unit (CHSU) to ensure that confirmed cases of carpal tunnel syndrome or HAVS arising from the use of vibrating handtools, or handling of material being processed that transmits vibration are reported appropriately in accordance with the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995 – see separate ‘Accident/Incident Reporting and Investigation Policy’ and respective Corporate Management Arrangements;
- 6.9.7 Together with the vibration consultant/contractor ensure that line managers of employees exposed to vibration and undergoing medical screening are provided with adequate information regarding any work restrictions (eg. work patterns) for employees identified as being at particular risk from further exposure to vibration.

**6.10 Consultant/Contractor Occupational Health Provider engaged will:**

- 6.10.1 Review completed medical screening questionnaires, and conduct any further enquiries and medical assessments deemed necessary and appropriate with employees identified as requiring further assessment;
- 6.10.2 Where employees’ symptoms have been diagnosed as a recognised condition, which can be directly linked to exposure through a work activity, carry out health surveillance out at least every six months;
- 6.10.3 Where referred employees have reported health symptoms suspected of being as a result of exposure to vibration to their manager, conduct a presumptive diagnosis, and if necessary refer to a doctor or consultant qualified in the diagnosis and screening of hand arm or whole body vibration (as appropriate) for formal diagnosis;
- 6.10.4 In the case of formal diagnosis of hand arm or whole body vibration ensure that the Authority’s Occupational Health Department are informed and are provided with copies of all relevant health surveillance, forms and reports.
- 6.10.5 Where required, provide advice, information and support to employees, who have been exposed to vibration at work, and inform managers of significant findings of health surveillance;
- 6.10.6 Maintain health records of any employees relating to above. These records must be kept for at least forty years; ensure that these records are provided to the Authority’s Occupational Health Department.
- 6.10.7 Inform the Authority’s Occupational Health Department of any confirmed cases of carpal tunnel syndrome or HAVS arising from the use of vibrating handtools, or handling of material being processed that transmits vibration to allow reporting under the RIDDOR Regulations.

6.10.8 Together with the Authority's Occupational Health Department ensure that line managers of employees exposed to vibration and undergoing medical screening are provided with adequate information regarding any work restrictions (e.g. work patterns) for employees identified as being at particular risk from further exposure to vibration.