

Hand Arm Vibration at Work Policy

1. The Council will put in place measures to protect employees from the risks of Hand Arm Vibration Syndrome (HAVS), which can be caused by exposure to vibration. These measures will include:
 - a) Avoiding use of equipment which may result in exposure to vibration. Alternative options for task completion should be considered first, where reasonably possible.
 - b) Assessing the risks from vibration exposure
 - c) Taking steps to reduce vibration exposure
 - d) Taking into account vibration risks when purchasing or hiring equipment
 - e) Providing training and information for employees on the risks from vibration and the measures in place to reduce these
 - f) Providing health surveillance where the risk assessment shows that this is appropriate.
1. This will enable the Council to satisfy its obligations under the Control of Vibration at Work Regulations (2005) and the Management of Health and Safety at Work regulations (1999).
2. Exposure Action Value (EAV) and Exposure Limit Value (ELV)
 - a) Wherever exposure at or above a level of 2.5 m/s^2 or 100 points (averaged over a day), certain actions (including health surveillance) are required to control the risk.
 - b) The maximum ELV permitted for any individual on a single day is 5 m/s^2 or 400 points (exposure averaged over a day)
 - c) The Council recommends a limit of 250 points per day (yellow on colour chart – above action value but below limit value).
3. **Risk Assessment**
- 4.1 Vibration risk assessment is required if employees work with, for example, hand held tools (e.g. drills, breakers, sanders, chain saws, hedge trimmers); hand guided tools (such as pedestrian lawn mowers, buffers) or materials held against a vibrating object (e.g. use of a grinder, timber being guided through a band saw).
- 4.1 Risk Assessment requires:
 - a) Assessment of the vibration magnitude from each piece of equipment used. This information can come from three sources:
 - i. Accurate data is available from organisations which have measured vibration levels of equipment in real use
 - ii. Direct measurement of vibration levels – this is a specialist area and is not usually necessary or appropriate.
 - iii. Data may be provided by the manufacturer: however, manufacturers' data will often come from testing under specific controlled conditions which are very different from normal working practices and therefore may significantly underestimate exposures in practice. If this is the only information available, the numbers should be doubled to allow for 'real world' factors.
 - b) Measurement of vibration levels where published data is not available, and there is reason to believe that individual exposure is potentially close to the ELV.

- c) identification of who might be affected
 - d) identification of exposure time for those individuals, ensuring this is the 'trigger time' or 'contact time' i.e. the time for which the operators' hands are exposed to vibration, not the overall time spent on the job.
 - e) calculation of daily vibration exposure for individuals, taking into account equipment used and length of time in use ('trigger time'). The Health and Safety Executive have produced a 'calculator' which will enable conversion of working times and vibration magnitudes into an overall exposure factor. It will also enable the summation of exposures if more than one piece of equipment is used. <http://www.hse.gov.uk/vibration/hav/vibrationcalc.htm>
 - f) identification of other risk factors, for example work in cold or wet environments increases the health risks from vibration exposure
 - g) consideration of individual factors. For example, the presence of some health conditions may increase risk from vibration exposure and smoking can affect circulation; the way some employees use equipment (posture, technique) may increase their vibration exposure from a particular activity by up to 50% compared to colleagues.
- 4.3 The risk assessment should include an action plan which documents the measures already in place to reduce the risk from vibration exposure and any further measures planned.
- 4.4 The risk assessment should be reviewed if there is any change in vibration exposure.

5. Reducing Risk from Vibration Exposure

Measures to reduce risks from vibration exposure may include:

- a) replacing tools and equipment with alternatives which produce lower magnitudes of vibration
- b) Ensuring work activities are designed to consider ergonomic principles, and to encourage good posture
- c) ensuring all equipment is properly maintained
- d) reducing time exposed to vibration e.g. regular breaks, job rotation etc
- e) providing suitable clothing to protect employees from cold and damp
- f) providing suitable training and information for all those exposed to vibration

6. Health Risks

- 6.1 Exposure to vibration carries a risk of health effects. This is most likely with exposure above the EAV of 2.5 m/s but may occur at lower exposures.
- 6.2 Hand Arm Vibration Syndrome (HAVS) covers a number of different conditions, one or more of which may be present in an affected individual.
- a) Vascular disorders (affecting circulation) – commonly 'blanching' of the fingers (especially on exposure to cold or to vibration) often followed by blueness redness as rewarming occurs
 - b) Neurological disorders – including numbness, tingling of the fingers, reduced strength, reduced sensitivity and loss of dexterity

- c) Musculo-skeletal symptoms such as joint pain and stiffness, reduced strength and dexterity and carpal tunnel syndrome
- 6.3 Symptom severity worsens with continued exposure and may be disabling and irreversible.
- 6.4 In certain circumstances, HAVS is reportable under RIDDOR. Carpal tunnel syndrome is reportable under RIDDOR where it is associated with vibration exposure.
- 6.5 Health surveillance must be carried out for employees who are regularly exposed to vibration above the exposure action value (2.5. m/s).
- 6.6 Health surveillance will also be offered to those exposed below the EAV if they are at increased risk e.g. if they report a pre-existing diagnosis of HAVS or any condition which affects circulation or nerve conduction such as diabetes, primary Reynaud's carpal tunnel syndrome etc.
- 6.7 Health surveillance will involve:
- a) Initial assessment prior to or very soon after first exposure by telephone, with face to face follow-up where required (see appendix 1 for questionnaire)
 - b) Annual assessment by questionnaire
 - c) Face to face review to be arranged if a questionnaire reveals symptoms; if an individual report symptoms between health surveillance questionnaires; or every 3 years otherwise.
- 6.8 Health surveillance will be carried out by the Line Manager. All individual records will be held in confidence. Where appropriate, summary results for groups of employees will be reported back to the Executive committee to indicate the effectiveness of vibration control.
- 6.9 Where health surveillance identifies the potential for HAVS in an employee, then the tier system advised by the Health and Safety Executive will be implemented and where necessary Occupational Health and or Medical assessment will be sought.
- 7. Training and information**
- 7.1 All employees who are exposed to vibration should be given training and information to include:
- a) the health effects and sources of hand-arm vibration;
 - b) whether they are at risk, and if so whether the risk is high (above the ELV), Medium (above the EAV) or low;
 - c) The risk factors (e.g. the levels of vibration, daily exposure duration, regularity of exposure over weeks, months and years).
 - d) How to recognise and report symptoms;
 - e) The need for health surveillance, how it can help them remain fit for work, the Council plan to provide it, how the Council plan to use the results and the confidentiality of the results;
 - f) Ways to minimise risk including:
 - i. Changes to working practices to reduce vibration exposure;
 - ii. Correct selection, use and maintenance of equipment;
 - iii. Correct techniques for equipment use, how to reduce grip force etc;
 - iv. Maintenance of good blood circulation at work by keeping warm and

massaging fingers and, if possible, cutting down on smoking.

- 7.2 Where new staff are employed, they should be made aware of the risks of vibration prior to first exposure, or at least within the first week of employment. This can be done at the same time as asking them to complete the initial health assessment form.
- 7.3 In addition, all employees should be given appropriate training in the use of equipment. This should include periodic supervised practice to identify work practices which may increase risk such as poor postures, gripping equipment too tightly etc.

8. Responsibilities

Responsibilities for the Council are:

- a) Town Council
 - i. Nominate a person(s) to implement the vibration regulations and ensure they have the necessary skills and competence
 - ii. Support the nominated person(s) in implementing measures to comply with the vibration regulations
 - iii. Ensure all managers and employees within the Council discharge their responsibilities in accordance with this policy
 - iv. Refer any suspected incidences of HAVS to a suitably qualified professional
- b) Maintenance Manager
 - i. Understand the scope and content of the Vibration regulations where this is relevant to work in their area
 - ii. Ensure vibration factors are taken into account when hiring or purchasing new equipment
 - iii. Ensure that necessary vibration risk assessments have been undertaken for any equipment used by those in their charge
 - iv. Implement and enforce vibration control measures
 - v. Ensure employees are suitably trained in all aspects of operating equipment, including vibration control
- c) Employee
 - i. Use all equipment in accordance with instruction
 - ii. Ensure all equipment is well maintained
 - iii. Report any defects or difficulties with vibrating equipment
 - iv. Co-operate with any programme of health surveillance which is identified as necessary following risk assessment
 - v. Agree to abide by the principles of this policy.

1. References and further reading

- a) Hand-Arm Vibration - The Control of Vibration at Work Regulations, 2005. L140 HSE Books
- b) Hand-arm vibration - Advice for employees (indg296 - rev1)
<http://www.hse.gov.uk/vibration/hav/indg296.htm>
- c) Hand Arm vibration at work – HSE pages
<http://www.hse.gov.uk/vibration/hav/index.htm>

d) Management of Health and Safety at Work Regulation