

INSTRUCTION 24

HAND ARM VIBRATION SYNDROME (HAVS)

References:

- A. Health and Safety at Work Act 1974
- B. Hand Arm Vibration Regulations (as amended).
- C. The Management of Health & Safety at a Work Regulations (as amended).

24.1 Hand Arm Vibration Syndrome (HAVS) is a widespread industrial disease affecting tens of thousands of workers. Its best known effect is vibration-induced white finger (VWF). Attacks are painful and can result in the loss of the ability to grip properly. Any vibrating tool or process which causes tingling or numbness after 5-10 minutes is suspect. Where people regularly work for prolonged periods with tools and processes likely to be hazardous, there is likely to be a risk of injury.

24.2 Examples of common tools and processes likely to create hazardous vibration include pedestal grinders and hand-held portable grinders, chain saws, brush cutters, hand-held or hand-fed circular saws, mowers and strimmer's.

Responsibilities

Occupational Health surveillance

24.3 The Council will provide appropriate health surveillance, where the risk assessment shows it to be necessary. The surveillance programme should enable symptoms to be assessed and appropriate control measures and information to be given to individuals.

Managers/supervisors

24.4 Managers and supervisors are to:

- Carry out a risk assessments on the tools being used;
- Ensure there is a robust maintenance programme for tools and plant according to manufacturer's instructions. This programme should include the replacement of vibration mounts before they wear out, rotating parts are checked for balance and replace them if necessary;
- Analyse data from the HAV monitoring system to identify personal vibration exposure levels, using this information to prioritise future work (individual and group) and introduce further controls such as job rotation.
- Ensure that these controls are written into the Safe Systems of work (SSOW) communicated and implemented by employees.
- Ensure a list of all employees at risk is sent to the health and safety team so they can be included on a health surveillance programme and new employees have had occupational health screening prior to taking up employment.
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24.5 Introduce a preventative programme where necessary incorporating:

- Training and information;
- Vibration control (substitution; low vibration tools; proper maintenance; grip reduction arrangements; training in grip minimisation techniques; proper selection of tools; avoidance of uninterrupted vibration exposure over long periods);
- Personal Protective Equipment (PPE) to help maintain blood circulation (i.e. gloves to keep the hands warm).

Employees

24.6 Employees are to:

- Use equipment correctly, this includes the use of any PPE;
- Ensure they do not exceed recommended exposure limits;
- Report equipment faults;
- Report HAVS symptoms;
- Attend occupational health screening as required.

Anti- vibration gloves

24.7 Gloves can be helpful in reducing risks from HAVS. In cold conditions gloves will keep the hands warm, aiding circulation. Gloves are often necessary to protect against other risks and must be able to be used with the tool and task. Various gloves with special soft linings intended to reduce vibration risks, are available commercially, these usually provide little attenuation at the most hazardous frequencies and in some cases may increase the vibration reaching the hand. Therefore, unless test data is available for both the glove and the tool, it is best to assume they will not reduce the exposure to HAVS.

Purchasing new equipment

24.8 Under the Supply of Machinery (Safety) Regulations suppliers must provide information on vibration levels if hand-held or hand-guided machinery is likely to subject workers to vibration exceeding 2.5 m/s^2 when the tool is operating. Therefore when purchasing new equipment the following questions should be asked:

- Is the vibration of any handle or other surface to be held by the user likely to exceed an acceleration of 2.5 m/s^2 , in normal use?

If YES then:

- What is the frequency-weighted acceleration:
 - under operating conditions producing the highest vibration?
 - under typical operating conditions?
 - under other standard conditions?
- Under what operating conditions were the measurements made?
- If the tests were in accordance with a published standard, provide details and indicate the extent to which the vibration may differ from the quoted values under normal conditions of use.
- What measures have been taken to minimise vibrations?
- Are additional vibration reduction measures practicable? Give details of any design changes, the additional cost and any production penalties.
- What is the maximum frequency – weighted acceleration that the tool or equipment can be guaranteed not to exceed?
- What tests would be carried out to confirm any claims made in answer to question above?
- What other measures are required to minimise the vibration hazard to which employees are exposed when using the tool or equipment in question? Give details of any special maintenance requirements.

24.9 Further information can be sought from the occupational health advisor or the health and safety team.