

Hand-arm Vibration

Guide for Managers

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HAV, HAVS and Our Duty to prevent or Control Exposure

What is Hand Arm Vibration (HAV)



Vibration from hand held powered tools and hand guided machinery such as:

- Chainsaws
- Breakers
- Disc Cutters
- Drills
- Brush Cutters, etc.

There are no safe levels of exposure to vibration

Hand Arm Vibration Syndrome (HAVS)



Legal Duties

Council Failed to Prevent HAVS

A council has landed a penalty of almost £35,000 after 29 employees were diagnosed with hand arm vibration syndrome (HAVS).

Cheshire East Council was prosecuted by the HSE in January 2011 after a 56-year-old employee from Crewe developed a severe form of HAVS. The worker, who has asked not to be named, joined Crewe and Nantwich Borough Council as a mechanic in 1984 and regularly used heavy-duty vibrating equipment, including pneumatic drills and hand-held grinders.

Despite being diagnosed with HAVS in 2005, the council failed to take any significant action for nearly four years. The council pleaded guilty to 29 breaches under Regulations 5 and 6(1) of the Control of Vibration (Workplaces) Regulations 2005 at South Cheshire Magistrates Court on 21 January 2011. The council was fined £5,300 and ordered to pay £5,860 towards the prosecution.

Council Fined for not Managing HAVS

Wirral Metropolitan Borough Council council has been ordered to pay almost £35,000 in fines and prosecution costs after 29 employees were diagnosed with a hand arm vibration syndrome (HAVS) developed between July 2005 and December 2009.

Peter Richards aged 48, one of the employees involved, began noticing symptoms after several years working at Hoylake Golf Course. He regularly worked with chainsaws and mowers. He suffers from numbness and intense pain in his hands during cold weather. Mr Richards has since changed jobs and is no longer undertaking work that does not involve working with vibrating equipment.

The council workers' duties included grass, hedge and tree cutting, primarily using vibrating equipment. A HSE investigation showed the council did not properly assess the risks they faced of using such equipment or implement suitable control measures, such as limiting exposure to the tools or providing alternatives.



Cost, Compensation, Claims

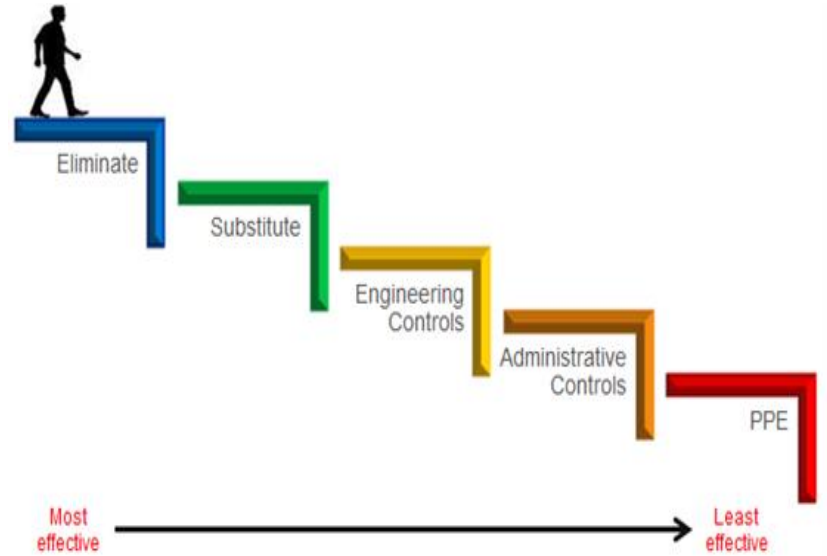


Managing HAVS

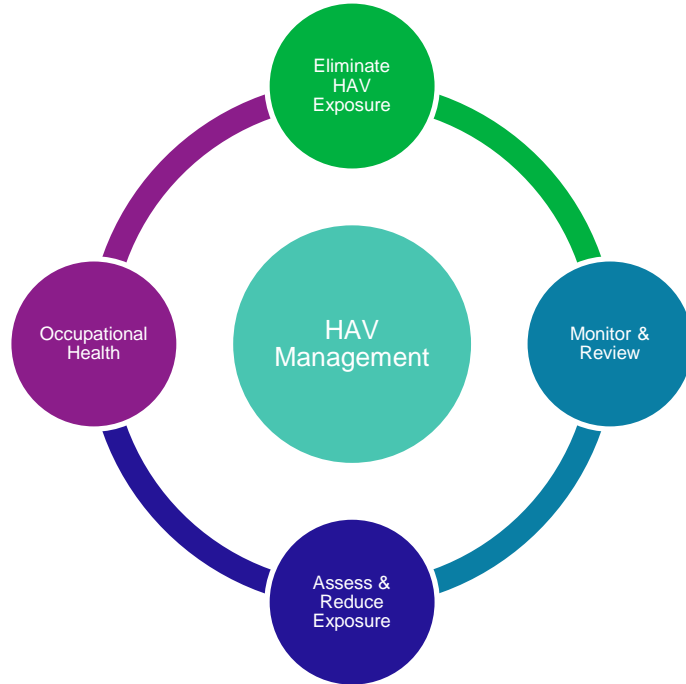
Prevention is Our Priority

- Prevention is better than cure!
- All work-related ill health is preventable

Step	Description
Eliminate	Choose an alternative process, material, or methodology that eliminates the hazard
Substitute	Substitute a process, material, or methodology for a less harmful alternative
Engineering Controls	Suitable work equipment, mechanical solutions and physical conditions that control and minimise exposure
Administrative Controls	Implement robust procedural compliance, monitoring, good practice, safe systems of work, RAMS, training, permit controls etc
PPE	The provision and correct use of appropriate protective equipment including respiratory protection, hearing protection and clothing



Managing HAVS



Elimination of HAV Exposure

- Eliminate exposure to vibration where reasonably practicable through careful planning
- During the pre-construction phase the designer should prioritise elimination of the potential for hand arm vibration exposure by applying the principals of prevention
- The Site Lead should challenge every element of the design to ensure that all reasonably practicable measures have been taken to achieve this
- Ensure that consideration is given to the use of alternative working practices to eliminate or reduce vibration for each task

Assess HAV exposure and review

- For tasks where the risk of vibration cannot be eliminated, an assessment of potential vibration exposure levels must be undertaken
- Use the Manufacturers Vibration Emission Data and the HSE Ready Reckoner/ Calculator for each individual task
- The Ready Reckoner requires the following information:
 - Vibration magnitude of each vibrating tool to be used
 - The duration and frequency of exposure
 - Number of people
 - Scope of work

Monitoring systems (ATPMS)

- Projects using ATPMS must ensure that all supervisors and users are trained and competent in its use
- The Site Lead must ensure that each names individual using the system is issued with a 'swipe card' (procured from the manufacturer of the ATPMS) which is programmed with the person's personal details including a unique number and the individual's permitted vibration exposure levels as defined by the procedure
- Obtain and review the ATPMS data on a regular basis to ensure that vibration exposure levels detailed within the Safe System of Work have not been exceeded. Where excursions above the exposure levels have occurred, the Site Lead shall undertake a review of the activity and reassess the risk control measures for the works

Risk Control Measures for HAVS

- The risk control measures should be defined in the Safe System of Work and implemented in full, including:
 - Supervision, monitoring and review of the SSOW
 - Adherence to trigger time exposure limits
 - Measuring/logging trigger time exposure where appropriate
 - Maintenance of the work equipment
- Remind the workforce of the HAVS risk control measures during Daily Activity Briefings.

Controlling the risk of developing HAVS - Summary

ELIMINATE:

- Where possible avoid vibrating tools and equipment. Ask yourself “is there another way?”

MINIMISE:

- Select low vibration tools and equipment
- Job rotation
- Maintain equipment and replace when necessary
- Monitoring system in place and adequate supervision to ensure operatives are aware of and stick to daily exposure limits

MITIGATE:

- Provide adequate training and instruction on use of vibrating tools and effects of HAV
- Provide warm, dry gloves to keep hands warm and dry
- Ensure health surveillance takes place
- Ensure there are means by which operatives can report signs or symptoms of HAVS

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Occupational health surveillance

Line Managers must ensure that anyone required to use hand held or guided vibrating tools/equipment must be engaged in a suitable health surveillance programme (HSF-PR-0035 Occupational Health Surveillance Assessment), prior to and continuously thereafter whilst they are required to operate hand held or guided vibrating tools/ equipment.

Stage 0 – 3 yearly rolling programme of Health Surveillance

Diagnosed Stage 1 or Stage 2 Early – annual Face to Face health assessment

Diagnosed Stage 2 Late or Stage 3 – employee prohibited from using hand held tools/equipment, and no further health surveillance required

Questions?

Balfour Beatty