

## HAVS

Hand Arm Vibration Syndrome (HAVS) is a term describing a group of disorders arising from exposure to hand held power tools, hand guided equipment, and the holding of materials or work pieces presented for machining. HAVS is a function of the frequency of the task, the magnitude of vibration levels, and the individual's medical susceptibility. Susceptible groups include those who work with percussive metalworking tools, hammer/drill action tools, rotary tools and grinders. HSE statistics show that by the late 1990's over 4 million workers were exposed to vibration at work. QBE have a significant number of outstanding HAVS claims representing significant reserves. Claim frequency is increasing and court awards have increased significantly over recent years.

### MINIMUM STANDARDS

1. Risk assessments are completed for all tasks involving the use of vibration tools. This should identify vibration hazards/tasks, persons at risk, equipment used, measure exposure times, identify existing control measures/features, record vibration magnitude, and categorise risk in line with the exposure action values (EAV) & exposure limit values (ELV) in accordance with the Control of Vibration at Work Regulations 2005. This will include determining employees' personal daily averaged exposure (A8) from manufacturers' data and other sources.
2. QBE recommend the use of a third party specialist where competence is not available in-house. Specialists should establish accurate vibration measurements e.g. using an accelerometer, establish field values/dose by accurately measuring trigger times, and give advice on suitable and practical control measures.
3. A hierarchical approach is taken with regards to the selection of 'suitable' risk control measures (i.e. they should not present additional/other risks). This will include:-
  - Elimination & Substitution e.g. remote or automated tools, welding not riveting.
  - Reduce transmission to hands e.g. using low vibration tools, mounting work-pieces and improving ergonomics e.g. better grip design and lower weight tools.
  - Maintenance i.e. replacement of worn parts, maintenance of anti-vibration devices and sharpening tools to improve efficiency and reduce exposure time.
  - Reduce Time Exposure through rest breaks and job rotation.
  - Information, instruction and training. This to include information on the health risks of using vibration equipment and validation that control measures are used and understood.
4. A system of regular health surveillance and screening is in place both for new employees and those at risk including those with HAVS, susceptible individuals and those exposed above the Exposure Action Level.

### BEST PRACTISE

- Reduced HAV exposure is incorporated within the business case for change in process i.e. alongside cost savings based on improved productivity / product quality
- Technical advancements in safe equipment and HAV monitoring systems are embraced e.g. 'In-line' devices are used to determine & monitor accurate field usage.
- A system of planned preventative maintenance ensures the efficiency and reliability of tools, and demonstrates that reasonably practicable steps have been taken to maintain safe plant and ensure a safe system of work.
- Employees exposed to HAV are authorised, trained and validated as competent to perform the task. Operators' safe performance of the task correlates with the safe system of work. Knowledge of control measures to be employed is demonstrated, supervised, verified and subject to continual monitoring.
- A pro-active and risk based health surveillance programme is in place for employees exposed to HAV, even where it is suspected their exposure is below the exposure action value as defined in the 2005 Regulations.
- Ultimately, a robust and documented safe system of working demonstrates that operator's daily personal vibration dose was within safe levels. The EAV is not considered a safe level or benchmark for achievement. Exposure levels are reduced in accordance with legal maxim 'so far as is reasonably practicable'.



## LEGAL REQUIREMENTS

The Control of Vibration at Work Regulations 2005 are the main provision here, setting an exposure action value and exposure limit value for vibration levels at which action must be taken, or not exceeded. The Regulations also set requirements for risk assessment, health surveillance and training. These Regulations and associated guidance should be consulted in some detail where HAV is a factor. The Provision and Use of Work Equipment Regulations also contain important requirements for the suitability and selection of work equipment.

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## GUIDANCE & USEFUL INFORMATION

- HSE Website – [www.hse.gov.uk/vibration/index.htm](http://www.hse.gov.uk/vibration/index.htm)
- HSE: Hand-Arm Vibration - Control of Vibration at Work Regulations 2005, L140, 2005
- QBE Issues Forum: Will the new Control of Vibration at Work Regulations shake up the system (November 2004)
- QBE Issues Forum: QBE's Hand Arm Vibration Risk Management Workshop (November 2006)

For further information contact [RM@UK.qbe.com](mailto:RM@UK.qbe.com)