



HAND ARM & WHOLE BODY VIBRATION UPDATE

**£500 million of claims awarded against the British Coal Board.
£212,000 awarded to one railway worker.
Over 300,000 people in the UK suffering from the affects of vibration.**

No organisation can afford to ignore occupational vibration!

There has been growing concern over recent years about the effect of regular work with high-vibration equipment. Without effective identification, quantification and controls, employees using such equipment can suffer various forms of damage from Hand Arm Vibration (HAV) known as 'Hand-Arm Vibration Syndrome' or symptoms resulting from Whole Body Vibration (WBV) such as low back morbidity and trauma to the spine.

The Health and Safety Executive have recently launched their campaign on reducing vibration risks. This comes hot on the heels of new statistics published by the Association of British Insurers (ABI) calculating that vibration white finger accounts for more than 5% of all claims under employer liability policies; this being second only to claims for occupational deafness! With the level of activity on vibration claims rising year on year, and the new European Health and Safety Directive covering Hand-Arm Vibration, and the new Vibration at Work Regulations, no organisation can afford to ignore occupational vibration!

Vibration at Work Regulations 2005

A set of minimum Health and Safety requirements relating to workers exposed to risks arising from mechanical vibrations (part of the Physical Agent Directive) has finally been adopted. The new Vibration at Work Regulations 2005 introduce limit values for both HAV and WBV, beyond which specific prevention measures must be taken. The Regulations lay down two main reference levels. The first are "**Exposure Action Values**" (EAV) after which control measures must be introduced, such as purchasing low vibration equipment, job rotation and medical surveillance. The other levels are "**Exposure Limit Value**" (ELV) values that must not be exceeded. **These new Regulations on managing vibration came into force in the UK in 2005.**

Exposure Action Values:-

- A(8) 2.5 ms² for vibrations transmitted to the hands and arms;
- A(8) 0.5 ms² for vibrations transmitted to the whole body.

Exposure Limit Values:-

- A(8) 5 ms² for vibrations transmitted to the hands and arms;
- A(8) 1.15 ms² for vibrations transmitted to the whole body.



Although the new Exposure Action Level of 2.5ms^2 seems to be only slightly lower than the previous action level of 2.8ms^2 , these Regulations introduce a fundamental change in the way that the daily exposure $A(8)$ is calculated. To illustrate this, the table below shows some typical equipment, and the time it can be operated for to reach the old action level of 2.8ms^2 , the new Exposure Action Value of 2.5ms^2 , and the Exposure Limit Value of 5.0ms^2 .

Typical Equipment and Average Vibration Level		Maximum Time of Equipment Use in Minutes		
		Previous Action Level of 2.8ms^2	New Exposure Action Value of 2.5ms^2	New Exposure Limit Value of 5.0ms^2
Rotary Mower	8.2ms^2	135	45	180
Hedge Cutter	14.2ms^2	50	15	60
Jackhammer	11.7ms^2	45	20	85
Vibrating Plate	11.2ms^2	50	25	90
Hammer Drill	13.5ms^2	25	20	70
Disk Cutter	10ms^2	100	30	130

Note: Times are calculated assuming only one item of equipment is used per day.

In this example, it will therefore be illegal to use the hedge cutter for more than 60 minutes or the mower for more than 2 hours per day !

Some grace periods have been provided for some equipment, however these changes will have fundamental affects on the way some work is carried out within organisations. Many Heavy Engineering, Mining, Steel Work, Demolition, Grounds Maintenance, Building and Roads Maintenance activities will have to be completely revised to accommodate these new requirements. If action is not taken now then some of the equipment currently in use **or about to be purchased** will become obsolete (and un-saleable) once the new Regulations come fully into force necessitating the premature replacement of expensive plant.

Action Required

Organisations have no alternative but to take account of employee exposure to Hand Arm and Whole Body Vibration within their activities. HSE Solutions Ltd provide a full range of guidance advising on the management and control of occupational vibration and work in partnership with many organisations to provide the best value tailored vibration solutions for their needs. This includes the development and implementation of Hand Arm / Whole Body Vibration management programmes, accredited management, staff and assessor training, vibration assessments, advice and guidance on medical surveillance programmes, advice on the purchase of test equipment and the pursuit or defence of court actions. HSE Solutions Ltd are the only company that **provide this complete vibration solution.**

If you wish to receive your FREE INFORMATION PACK or further discuss the issues surrounding occupational vibration and the effects upon your organisation, contact, HSE Solutions Ltd, 102 Bath St, Glasgow, G2 2EN, Tel: 0141 332 3199 or access our web-site on www.hse-solutions.co.uk.