

information + ideas



Hand-Arm Vibration Syndrome explained

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On 6th July 2005, the Physical Agents (Vibration) Directive 2002/44/EC becomes law in the UK. Is your organisation ready?



What is Hand-Arm Vibration Syndrome?

- Hand-Arm Vibration Syndrome (HAVS) is a general term for a group of medical conditions caused by the transfer of vibration from powered tools and equipment to an operator's hand and arm.
- The most well known form of HAVS is a Vibration White Finger (VWF), a whitening of the fingers that can lead to circulatory, joint, muscle and nerve problems.
- VWF is amongst the most common reasons for occupational ill health claims against UK employers.

Does it affect many?

- Over 4.5 million employees in the UK are exposed to hand-arm vibration in the workplace. More than a million of these are exposed to vibration levels above the current UK Health & Safety Executive (HSE) Action Limit of 2.8m/s².
- The HSE estimates that around 36,000 people in the UK exhibit advanced symptoms of VWF.

What causes the problem?

- Hand-arm vibration is potentially a likely occurrence in industries such as foundries, heavy engineering and metal products manufacturing, where regular use of grinding equipment and other common tools may expose operators to higher levels of vibration.
- The risk of developing symptoms of HAVS depends on a number of factors, including the amount and length of exposure to vibration, and working conditions such as operator posture and environmental temperature.

Put simply, an operator may be at risk if they experience tingling or numbness in their fingers during, or immediately after, use of a vibrating tool or machine.

What does the new law require employers to do about the risk of hand-arm vibration?

- When it comes into force in the UK in July, the Physical Agents (Vibration) Directive 2002/44/EC will significantly reduce the acceptable level of exposure to vibration in the workplace from 2.8m/s² to 2.5m/s².
- This reduction in acceptable exposure level will impact industry by reducing "safe" working times of hand-held power tools by up to 60%, with obvious impact on productivity unless new ways of working are adopted.
- The Directive has been implemented by Regulations under the Health & Safety at Work Act (1974), and states that employers are required to:
 - Protect workers from the health risks resulting from exposure to vibration
 - Assess all risk to their employees from vibration and offer alternative working methods that reduce exposure where necessary
 - Reduce employees' exposure to vibration to a minimum by selecting appropriate work equipment designed to produce the lowest possible level of vibration.

How can 3M help?

- A number of 3M's abrasive products have increased flexibility and better balance characteristics, and can contribute to a reduction in the level of vibration generated to hand and arm. In addition they can help reduce operator fatigue, improve the workplace environment and even improve surface finish.

For more information please contact the 3M Abrasive Systems Customer Information Team on 0870 60 800 90, or email abrasives.uk@mmm.com

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