



Health & Safety Executive
reducing risks · protecting people

Hand-arm Vibration & Recent Developments

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What we are going to talk about



- HAV Refresh
 - Issues
 - What are we looking for
 - Good / bad practise
- What's coming
 - Civil claims increases
 - HSE LA Control project
- **Aim:** To feel comfortable dealing with N & V

Controlling the Risks from Hand-arm Vibration

HSE guidance and expectations

Why ?



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- Regulations
 - Control of Vibration at Work Regulations 2005
 - Not new (HSG88)
 - HSE Topic
 - Industrial Injuries
 - 1.7M workers exposed above EAV
 - 1M workers exposed above ELV

Who is exposed to HAV?



- Greatest numbers in construction industry and related trades
- Highest levels of exposure in fabrication, foundry fettlers, stone masons, MVR
- Significant progress has been made in construction – still a long way to go.

Causes of HAVS



- HAVS covers a range of issues
- Caused by or aggravated by hand vibration
- Influenced by
 - Cold / wet hands
 - Lack of regular breaks
 - Ergonomics / grip loads

Effects of Hand-arm Vibration Syndrome (HAVS)



- Numbness, tingling, poor sense of touch/temperature
– **Disabling in advanced cases**
- “Vibration white finger”
– typically cold-induced attacks
- Pain, weak grip, etc
- Lifestyle impact
- **Avoidable**

The Vibration Regulations – in Brief



- Exposure Action Value (EAV) **2.5 m/s² A(8)**
- Exposure Limit Value (ELV) **5 m/s² A(8)**

Exposure not Emission

Duties of employers (at any exposure level)



- **Assess** vibration risks to health and safety
- **Eliminate** vibration *risk* at source, or reduce to lowest reasonably practicable level
- Provide **information and training** for employees on vibration risks and control measures



Duties of employers if the EAV is *likely* to be exceeded:



- Reduce *exposure* as low as reasonably practicable
- Introduce health surveillance



Duties of employers: the exposure limit value



- Ensure employees are **not** exposed above the ELV

- If they are, take action

Issues We See....Management



- Management Issues
 - Policy issues
 - Lack of support / direction / knowledge sharing
 - Over reliance on ‘system’
- Management of contractors
 - No management!
- Vibration not considered at planning / design stage (CDM)

Issues We See....Application



- Majority of effort spent quantifying exposure
- Poor or minimal
 - Planning of project / job
 - Maintenance
 - Training
 - Health Surveillance
 - Inadequate
 - Not acted upon

How do we move forward ?

Where Do We Start.... Suitable & Sufficient RA Identifies....



- Where there may be a risk from HAV
- **A soundly based estimate of exposure and comparison with EAV / ELV**
- Available risk controls
- Identification of individuals at more risk
- Steps to control & monitor risks

Can Be Done At Planning Stage

Emphasis On Action

What we usually see....



Our Challenge



Away from...

- HAV assessment as an end in itself
- Excessive effort on the quantification of exposure

Towards...

- Prepare an action plan to reduce risks (Risk assessment)
- Keep it simple
- Focus on controls

Integrated Approach to Health & Safety
Look for links with noise, dust control etc

What does vibration control look like?



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- Look for alternative processes, equipment, methods when planning jobs
 - Keep up with good industry practice
 - Consider vibration & efficiency when selecting tools and machinery
 - Consider people – Rotation, time limits, training
 - Maintenance & repair
 - Links with noise policy etc

Consider at the planning / design stage - CDM

Mechanisation removes the risk

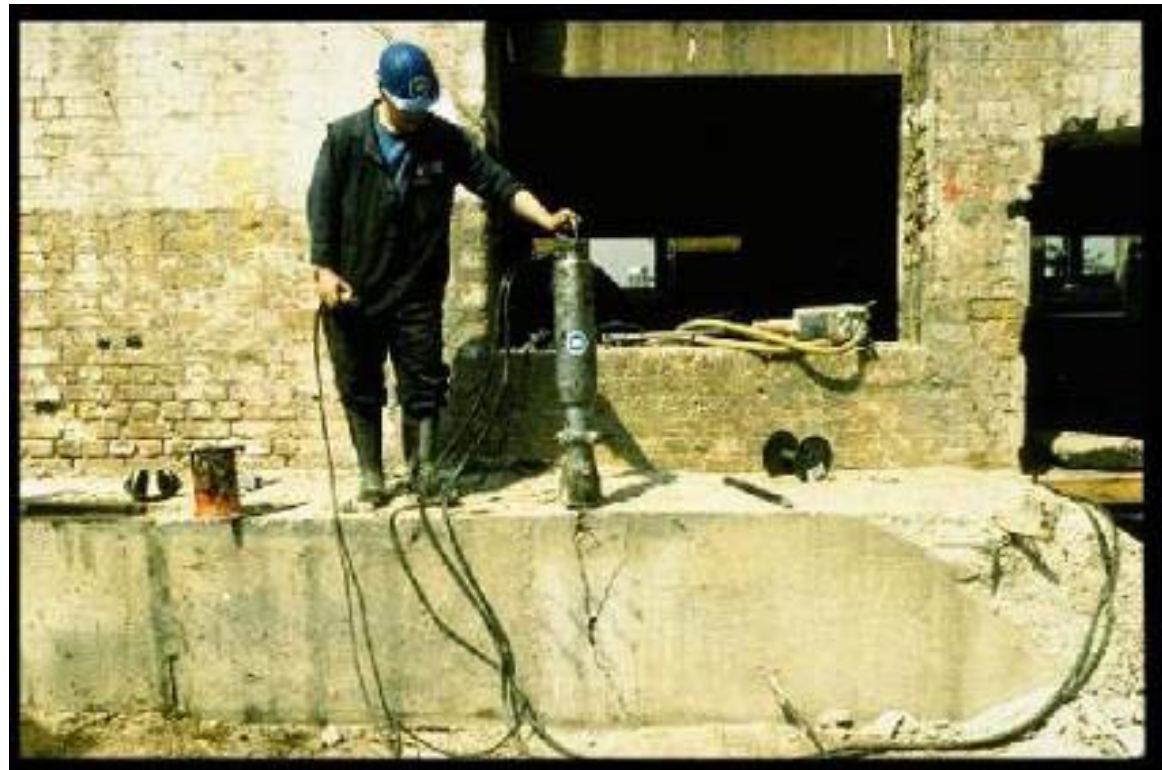


Reduces Risks From:
HAV / Noise / Ergonomics /
Debris / Traffic....



Hydraulic bursting

- Some drilling is required
 - Efficient drills are lower risk than breakers
- Bursting has low noise and vibration
- Noise and vibration exposures are reduced



Demolition without noise/vibration



- Use hydraulic crushers instead of demolition hammers
- Reduced HAV / Noise / Dust / Annoyance / Project risk etc

Example – Operator Training / Maintenance

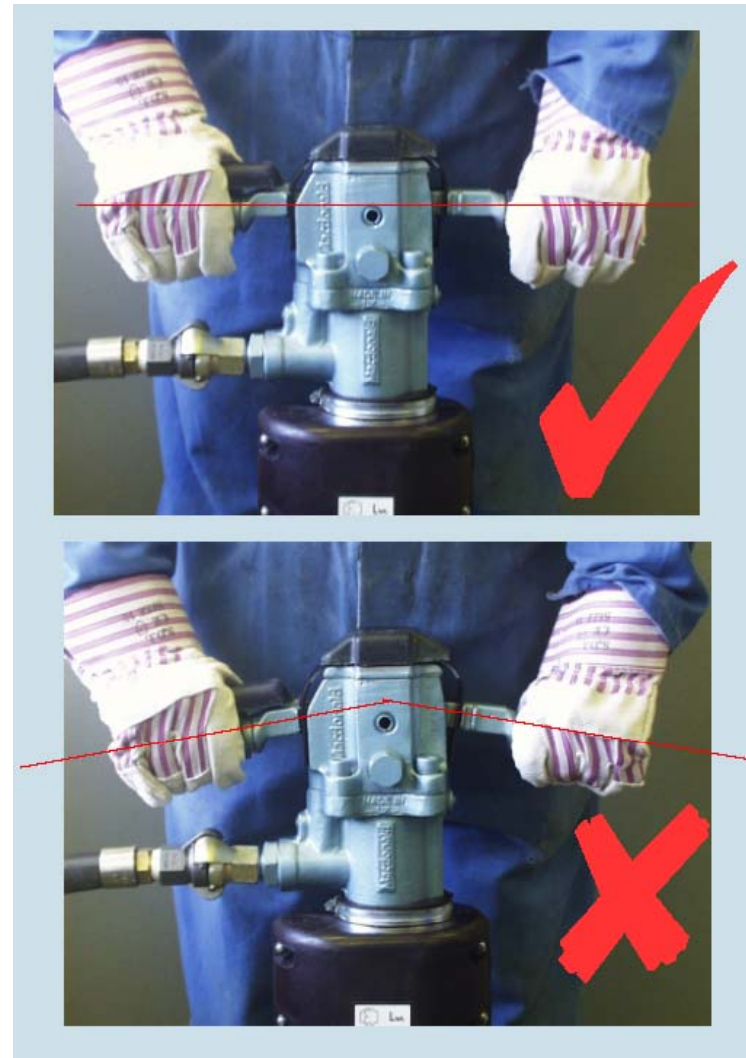


Anti-Vibration Features

- Do operators know how to use features

Maintenance

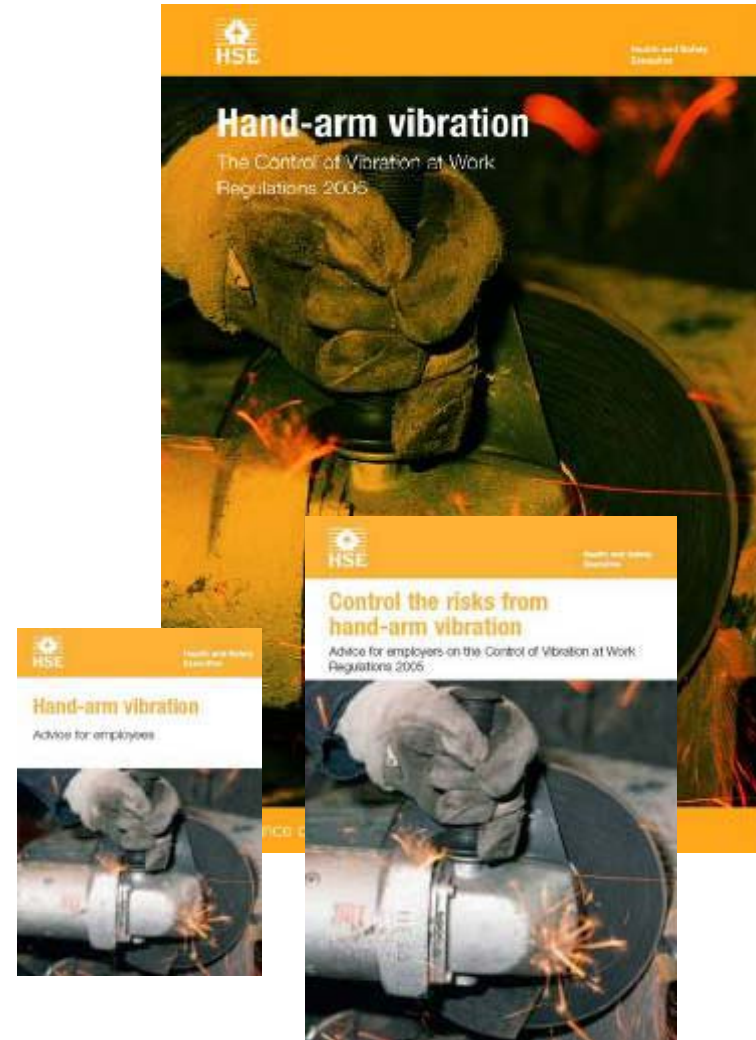
- Is equipment maintained as per manufacturer guidance
- Do operators carry out daily checks / know how to check equipment



HSE's guidance on HAV



- Guidance book (L140)
- Employers' leaflet
- Employees' pocket card
- Vibration web site
- www.operc.com
- HAV Topic pack





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HAV

What's Coming



Civil Claims Increase...



Claim culture is rapidly developing for HAVS:

- Norfolk Council 2008
 - £200k
- Liverpool Council 2007
 - £100k
- First Bus 2007
 - £100k
- **How will this impact approach?**

HSE / LA Control Project.....



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- Why ?
 - LA's large employers
 - Volume of injury reports
 - Do we need more than Riddor investigations
 - Phase 1 - Approach
 - Policy / RA's / Basic Controls / Health Surv
 - Phase 2 – The detail
 - Progress / Acting on RA / Controls / Training / Consistency.....

What have we found.....



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- The Good...
 - Policy and knowledge good
 - Some good examples of controls
 - Some good examples of training
 - Good communication through working groups
 - The Could Be Better...
 - Lack of consistency across divisions
 - **Too much measuring**
 - Slow to react
 - Health surveillance variable

What next.....



-
- How should we move forward ?

Further Help



- N&V Specialists:
 - Bruce Appleton (Aber / Inver / Glas)
 - Stuart McGregor (Edin / N. England)
- Health & Safety Executive
 - www.hse.gov.uk/noise
 - www.hse.gov.uk/vibration
 - Infoline : 0845 345 0055
- www.operc.com