

15<sup>th</sup> December 2009

# NJC HEALTH AND SAFETY BULLETIN

Please find attached NJC Health and Safety Bulletin concerning Hand Arm Vibration for circulation to all in-scope Projects.

This will also be available as a download from the NJC website.



# HEALTH AND SAFETY BULLETIN

# HAND ARM VIBRATION





### Hand-arm vibration (HAV)

HAV is vibration transmitted into your hands and arms when you use powered work equipment. Too much exposure to vibration can cause hand-arm vibration syndrome.

### Hand-arm vibration syndrome

- It is a disorder which affects the nerves, blood vessels, muscles and joints of the hand, wrist and arm.
- It can become severely disabling if ignored.
- It includes vibration white finger (VWF), which can be triggered by cold or wet weather and can cause severe pain in the affected fingers.

# Signs to look out for

- Tingling and numbness in the fingers.
- You can't feel things (you'll have difficulty picking up small objects such as screws or nails).
- Pain, tingling or numbness in your hands, wrists and arms which may stop you from sleeping.
- Loss of strength in hands (you may be unable to pick up or hold heavy objects).
- In the cold and wet, fingers go white, then blue, then red and are painful.

## Examples of Equipment that can cause HAV

Hand-held power tools and machines such as:

- concrete breakers, concrete pokers;
- sanders, grinders, disc cutters;
- hammer drills;
- chipping hammers;
- chainsaws, brush cutters, hedge trimmers, powered mowers;
- scabblers, needle guns;
- Work Pieces that are held and vibrate such as pedestal grinders

# **Reducing the risks**

It is your employer's responsibility to protect you against HAVS, but you can:

- ask your employer if your job could be done in a different way without using vibrating tools and machines;
- use a low-vibration tool;
- always use the right tool for the job;
- check tools before using them to make sure they have been properly maintained and repaired to avoid vibration caused by faults and general wear;
- make sure cutting tools are kept sharp;
- reduce the amount of time you use the tool in one go, by doing other jobs in between, if possible;
- avoid gripping or forcing the tool or work piece more than you have to;
- store tools correctly so that they do not have very cold handles when next used;
- encourage good blood circulation by:
  - keeping warm and dry (wear gloves, hat, waterproofs and use heating pads if available);
  - o giving up or cutting down on smoking as smoking reduces blood flow;
  - massaging and exercising your fingers during work breaks.

### Steps to take

- Learn to recognise the signs and symptoms of HAVS.
- Report any symptoms promptly to your employer or the person who does your health checks.
- Ask your health and safety representative for advice.
- Use any control measures your employer has put in place to reduce risk of HAVS.

### **Measuring Vibration**

Measuring Vibration can be complicated, but there is help available from HSE or charts have been produced showing how long tools can be used. One has been developed by

OPERC (Off Highway Plant and Equipment Research Centre) and shows vibration magnitudes and times for a range of tools, this also links in with HSE's ready reckoner.

For more information visit the HSE web site: <u>www.hse.gov.uk/vibration</u>

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