

# HAND-ARM VIBRATION SYNDROME(HAVS)

## SAFETY PRECAUTIONS & WARNINGS

**Persons operating tools or equipment that emit certain levels of vibration should read, understand and take the necessary safety advice given below. It is important that these SAFETY PRECAUTIONS & WARNINGS are carefully read, and understood, before operating vibrating tools or equipment.**

## WHAT IS HAV?

1. The abbreviation HAVS means; 'Hand-Arm Vibration Syndrome'. It is a condition where a feeling of numbness, or tingling sensation, is experienced in the fingers, hands or arms (sometimes referred to as; 'dead hand', 'dead finger' or 'white finger' disease). This can be caused by the prolonged use of certain vibration emitting tools. **Prolonged use of vibrating emitting tools and equipment may lead to temporary or permanent damage to blood vessels, nerves and joints of the fingers, hands and arms.**

## THE SYMPTOMS OF HAV

2. The symptoms of HAVS may include the following, or a combination of:
  - A 'tingling' sensation in the fingers ('pins and needles'), hands or arms.
  - A numbness feeling in either the fingers or arms.
  - Fingers 'blanching' (turning white), becoming red and painful on recovery.
  - Unable to feel things or grip items properly.
  - Loosing strength in either hands or arms.
3. **Any of the above symptoms may appear after a short exposure to vibration. However symptoms may not become apparent immediately but continued exposure to vibration may result in the condition becoming permanent (HAVS). As the condition worsens it may be triggered by cold or damp weather, even without using vibrating equipment**

**WARNING: PROLONGED EXPOSURE TO EXCESS VIBRATION IS PREVENABLE. HOWEVER, ONCE THE DAMAGE IS DONE, IT IS PERMANENT!**

## WHAT TOOLS/EQUIPMENT CAUSES HAVS?

4. Listed below are some of the more common tools and equipment that may cause HAVS but this list below is not exhaustive:
  - Hammer drills.
  - Concrete breakers.
  - Cut-off saws (for stone work).
  - Powered sanders, polishers, grinders, disc cutters, etc.
  - Powered hammers and chisels.
  - Chain saws, hedge trimmers, etc.
  - Impact wrenches.
  - Jigsaws.
  - Scabblers.
  - Power mowers, trimmers and brush cutters.

5. The condition of HAVS may also arise when holding work pieces being processed by vibrating tools or equipment, such as pedestal grinders.
6. The vibration from such tools and equipment may be at a level that could be hazardous to the operator, if operated for extended periods. Regular and frequent use of such tools and equipment can lead to permanent health problems.

## REDUCING THE EFFECTS OF HAVS

7. As the operator of vibration tools or equipment, you must first assess and identify the possible risks associated with using vibrating tools and equipment and take the necessary measures to combat HAVS. The following actions are required in an effort to reduce the exposure and effects of HAVS:
  - Some tools and equipment will emit more vibration than others, therefore it is important to undertake a risk assessment on the work to be undertaken and the tools and equipment selected for the task. If in doubt, seek advice and guidance from the supplier of the equipment or your supervisor.
  - Seek alternative methods of undertaking the work to be done that doesn't involve the use of vibrating tools and equipment. Where possible use tools and equipment that have a lower vibration factor for the task being undertaken. Always use the correct tool for the job.
  - Vibration indicators can now be found on vibrating tools (in the form of 'stickers') to indicate their vibration factor and are labelled accordingly:

### (a) HIGH VIBRATION RISK EQUIPMENT

Use of this equipment could cause HAVS even when used for short periods, even for a few minutes to a few hours each day. You should consult the supplier of the equipment or your supervisor on its use and for how long.

### (b) MEDIUM VIBRATION RISK EQUIPMENT

This type of equipment may be used safely up to two hours and in some cases for longer periods depending on the tool being used and the type of work being undertaken.

### (c) LOW VIBRATION RISK EQUIPMENT

Equipment of this type may be used regularly throughout an eight-hour day.

- If no vibration indicator is attached to the tool or equipment or no information is readily available about its vibration level you should seek advice and guidance from the supplier or your supervisor. Failing this, you should regularly monitor the 'tingling' sensation and numbness on your fingers at regular intervals.
- Always ensure the tool or piece of equipment you are to use has

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been properly maintained and is serviceable.

- Ensure cutting type tools are always kept sharp.
- Always wear the appropriate gloves (preferably 'vibration gloves') and ensure the hands are warm before starting work and they remain warm and dry.
- In cold weather, ensure the hands are warm before starting work and they are kept warm. Wear the appropriate warm weather clothing in cold and wet weather to keep the rest of the body warm and dry.
- Use the correct technique when operating the tool or equipment, particularly the grip control on the tool or equipment. Do not grasp the tool or equipment too tightly, only sufficient to safely control the tool or equipment.
- Take frequent breaks from using the tool or equipment. During adverse weather, seek shelter and take hot drinks.
- Maintain good blood circulation. Massage and exercise the fingers, hands and arms at regular intervals and cut-down on smoking.
- Manage your work in an effort to avoid lengthy and continuous patterns of work when using high or medium vibration rated tools or equipment.
- If in any doubt regarding the onset of HAVS, consult your doctor. Do not leave the condition to manifest its self.

**WARNING: IF YOU EXPERIENCE A TINGLING OR NUMBNESS SENSATION WHILST WORKING – STOP WORKING IMMEDIATELY.**

## **IN CONCLUSION**

8. Study the following brief for the safe and healthy use of vibrating tools and equipment to avoid HAVS:

- **UNDERTAKE A RISK ASSESSMENT OF THE TASK TO BE UNDERTAKEN (WORK AND TOOLS). SEEK ADVICE IF NECESSARY.**
- **CAN THE TASK BE DONE USING A LOWER VIBRATION EMMITING TOOL OR USING AN ALTERNATIVE METHOD OR TOOL? SEEK ADVICE IF NECESSARY.**
- **ENSURE THE TOOL OR EQUIPMENT BEING USED IS SERVICEABLE AND WELL MAINTAINED. TOOL BITS AND CUTTERS MUST ALWAYS BE SHARP.**
- **WEAR THE APPROPRIATE GLOVES AND CLOTHING. KEEP HANDS WARM AT ALL TIMES.**
- **TAKE REGULAR BREAKS, EXERCISE FINGERS, HANDS AND ARMS.**
- **BE AWARE OF THE ONSET EFFECTS OF HAVS. CONSULT YOUR DOCTOR IF IN ANY DOUBT.**