



Safety Bulletin 117

Hand Arm Vibration Syndrome

Hand-arm vibration is vibration transmitted into your hands and arms when you use hand-held powered work equipment. Too much exposure to hand-arm vibration can cause hand-arm vibration syndrome (HAVS) and carpal tunnel syndrome.

It is a condition that can be severely debilitating to the individual and the business. The effects to the business can be for two reasons, the effects of losing employee hours, but also the possibility of legal action due to the work related injury. You only have to type 'Hand arm vibration syndrome' into Google for example, and you will be inundated with personal injury lawyers wanting to take on possible claims against the employer.

What is hand-arm vibration syndrome?

- ✚ HAVS 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, which can cause severe pain in the affected fingers.

What is carpal tunnel syndrome?

Carpal tunnel syndrome is a nerve disorder which may involve pain, tingling, numbness and weakness in parts of the hand, and can be caused by, among other things, exposure to vibration.

Early signs and symptoms to look out for

- ✚ Tingling and numbness in the fingers (which can cause sleep disturbance).
- ✚ Not being able to feel things with your fingers.
- ✚ Loss of strength in your hands (you may be less able to pick up or hold heavy objects).
- ✚ In the cold and wet, the tips of your fingers going white then red and being painful on recovery (vibration white finger).

If you continue to use high-vibration tools these symptoms will probably get worse, for example:

- ✚ the numbness in your hands could become permanent and you won't be able to feel things at all;
- ✚ you will have difficulty picking up small objects such as screws or nails;
- ✚ the vibration white finger could happen more frequently and affect more of your fingers.



When am I at risk?

You are at risk if you regularly use hand-held or handguided 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 or needle guns.

You are also at risk if you hold workpieces which vibrate while being processed by powered machinery such as pedestal grinders.

Tasks and industries

Which jobs and industries are most likely to involve hand-arm vibration?

Jobs requiring regular and frequent use of vibrating tools and equipment and handling of vibrating materials are found in a wide range of industries, for example:

- + Building and maintenance of roads and railways;
- + Construction;
- + Estate management (e.g. maintenance of grounds, parks, water courses, road and railside verges);
- + Forestry;
- + Foundries;
- + Heavy engineering;
- + Manufacturing concrete products;
- + Mines and quarries;
- + Motor vehicle manufacture and repair;
- + Public utilities (e.g. water, gas, electricity, telecommunications);
- + Shipbuilding and repair.



Reducing the risks

It is your employer's responsibility to protect you against HAVS and carpal tunnel syndrome, but you

should help by asking your employer if your job could be done in a different way; without using vibrating tools and machines. If this cannot happen:

- ✚ Ask to use suitable low-vibration tools.
- ✚ Always use the right tool for each job (to do the job more quickly and expose you to less hand-arm vibration).
- ✚ Check tools before using them to make sure they have been properly maintained and repaired to avoid increased vibration caused by faults or general wear.
- ✚ Make sure cutting tools are kept sharp so that they remain efficient.

- ✚ Reduce the amount of time you use a tool in one go, by doing other jobs in between.
- ✚ Avoid gripping or forcing a tool or workpiece more than you have to.
- ✚ Store tools so that they do not have very cold handles when next used.
- ✚ Encourage good blood circulation by:
 - keeping warm and dry (when necessary, wear gloves, a hat, waterproofs and use heating pads if available);
 - giving up or cutting down on smoking because smoking reduces blood flow; and
 - massaging and exercising your fingers during work breaks.

What else can I do?

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

If you are diagnosed with vibration white finger, you should inform your employer as soon as possible. If you stop exposure to vibration at an early stage in the condition, you may recover.

Also, by law, your employer must contact the Health and Safety Executive about your condition.

You may be entitled to Industrial Injuries Disablement Benefit - a payment given to people who have become ill or injured as a result of their work. Contact your nearest Jobcentre Plus to see if you qualify for this benefit.



If you require any further information, clarification or assistance with the above, then please do not hesitate to contact us;

Telephone; **01268 649006**
Freephone; **0800 046 8122**
Email; info@cjtsservices.co.uk

Source –Health and Safety Executive
NHS
HAVS Risk Management

www.hse.gov.uk
www.nhs.co.uk
www.havsrn.com