

1 Health and Safety Report - September 2017

1.1 Hand-Arm Vibration Syndrome (HAVS)

HAVS is a condition that has the potential to severely affect any employee who uses powered hand-tools or equipment. Typically, within an Internal Drainage/Water Level Management environment, this equipment could be Chainsaws, Strimmers, Hand Drills, Hedge-cutters etc. Any employee who is regularly exposed to high vibration holding and/or operating vibrating equipment may suffer from reduced blood circulation and damage to the nerves and muscles. This damage manifests itself as a tingling or numbness in the fingers. In more advanced cases, finger blanching can occur. The condition is also often referred to vibration white finger or 'dead finger'. (Symptoms are often similar to 'Raynaud's Phenomenon')¹.

It is vital to understand the effects of HAVS are cumulative relating to the amount of exposure overtime. This can ultimately lead to loss of manual dexterity, resulting in clumsiness and reduced grip ability. In severe cases, blood circulation may be permanently impaired and fingers may take on a blue-black appearance.

As indicated above, the primary cause of HAVS is work involving holding vibrating tools or equipment. The risk depends on the extent of the vibration and how long an employee is exposed to it.

Unfortunately, HAVS is often overlooked and not recognised for its seriously debilitating effects.

To help address this situation, there is included is a 'Model' HAVS Policy which deals with the situation and provides links to valuable information which is freely available from the Health and Safety Executive (HSE).

There are two sections included in the Policy (highlighted in blue text) which are included for guidance only and should be removed.



1.2 Whole Body Vibration

Legal Requirements

- Health and Safety at Work Act 1974
- The Management of Health and safety at Work Regulations 1999
- The Provision and Use of Work Regulations 1998 (PUWER)
- The Workplace (Health, Safety and Welfare) Regulations 1992
- The Personal Protective Equipment at Work Regulations 1992
- The Reporting of Injuries, Diseases, and Dangerous Occurrences Regulations 1995 (RIDDOR)

¹ Raynaud's phenomenon occurs when the extremities of the body, usually the fingers and toes, change colour and may become painful. It is due to a narrowing (constriction) of the small blood vessels on exposure to the cold, or to a change in temperature, or to emotional stress.

- The Supply of Machinery (Safety) Regulations 1992 (Amended 1994)
- The European Directive, Physical Agents (Vibration) Directive 2002
- The Control of Vibration at Work Regulations 2005

Recommending the IDB (as employer) consider;

- Can the job be done without using high vibration vehicles
- Ensure new vehicles have vibration control 'built-in'
- Modify existing vehicles and /or seating to reduce vibration levels
- Use the correct vehicle for the task at hand
- Ensure regular maintenance/asset management of plant and equipment
- Arrange works to facilitate 'breaks' from tasks
- Provide suitable training and awareness to the issue
- Provide health monitoring
- Ensure operators remain warm and dry, particularly in cold weather

Employees should;

- Report vehicles or plant which appear to produce high levels of vibration
- Ask and work with the employer to consider alternatives to deliver tasks that utilise high vibration machinery
- Cooperate with new working methods to reduce risks
- Choose the right vehicle for the job
- Check plant or equipment before and after use
- Reduce time spent in continuous use
- Avoid high speeds over rough terrain
- Keep warm and dry
- Encourage good blood circulation by;
 - Keeping warm and dry
 - Avoiding smoking before and during work
 - Exercising to improve blood flow
- Learn and recognise causes and signs of vibration injury and report **immediately** to the employer

1.3 Reducing Unintended Movement of Plant

Please find enclosed an extremely useful document 'Reducing Unintended Movement of Plant'²

Unintended movement of plant machinery occurs when inadvertent operation of a control such as a switch, lever or pedal occurs, causing unintended machine movement which can potentially cause serious injuries and fatalities.

The new publication, which has been developed in conjunction with HSE provides guidance on a range of control measures to help prevent this from happening.

1.4 Health, Safety and Welfare

An interesting issue that we have been dealing with regarding Board employees operating machinery for long periods of time. This has been found to aggravate and contribute to varicose vein problems the same way that standing in the same position for long periods of time does.

² Strategic Forum for Construction - The Plant Safety Group
ADA Technical and Environment Committee HS Report September 2017.docx.doc

There are wedge shaped cushions that can help alleviate the aching and tingling in the legs but ultimately the best course of action is to break after around 45 minutes and walk around, stretching legs and encouraging blood flow as well as taking on fluids. A five-minute break is usually sufficient to control/manage the symptoms. Ideally, employees who are involved in flail mowing and removal of emergent growth activities do need to be strongly encouraged to exercise regularly (outside of work as well if possible) to mitigate and control the adverse effects of sitting for long periods of time as this can also lead to back problems. It is however, vital that they use this potential 5-minute break productively and not just take a break and remain inactive.

Managers could of course consider building into work patterns breaks for site walkovers, taking pictures of drains before and after works, recording species etc.

Promoting what some Employers may see as 'down time' and employees in turn as an opportunity to play the system and add these mini breaks together to finish work early will no doubt offer a few challenges!

To ensure Employees cooperate dealing with this issue it could be supported thus;

Please note;

- **This is a recommendation to support your health and welfare**
- **This time cannot be added up and saved until the end of your shift**
- **You are expected to be reasonable in identifying break opportunities, therefore it may be more practical to break after 30mins or 1 hour depending on location and activity**
- **It is vital you physically move around during this break period. There is little point in having a break if you then do not remove yourself from the vehicle and stretch your legs**
- **This is not an official break or entitlement and as such any abuse of this recommendation will be subject to disciplinary action.**
- **This is not an opportunity to catch up with personal emails and/or messages**

1.5 Flail Mowing

There have been several incidents in the news lately regarding flail mowers. This equipment can be lethal if not maintained correctly or used for inappropriate functions. The risk assessment associated with this activity must recognise and mitigate any hazard identified.

It is always prudent to consider the use of a banksperson when working on, near or adjacent to public footpaths or bridleways to ensure the health safety and welfare of members of the public is not compromised.

1.6 Flooded Electrical Equipment / Control Panel

See enclosed³.

Particularly relevant to IDBs

1.7 Construction Design Management Regulations 2015

The requirements of CDM 2015 and its wider implications is evident within the latest HSE notices. There were 50 construction sector notices added to the register.

The notices register can be found [here](#);

CDM issues noted as follows;

- establishing a fully trained workforce;
- securing effective site management of key risks;

³ Safety Alert SA2017 - 09 - Flooded Electrical Equipment
 ADA Technical and Environment Committee HS Report September 2017.docx.doc

- client compliance with project management duties

Any, or all the above points are applicable to IDB operations.

It is essential each individual IDB understands its role and responsibility as a Contractor but also as a Client.

Enclosed is the HSE guidance on the regulations.