Hand-arm Vibration syndrome (HAVS) is commonly seen in people who regularly use high vibration equipment. Hazardous vibration tools are:

**Percussive metal working tools**
Powered hammers for riveting, caulking, hammering, clinching and flanging.

**Percussive stone working tools**
Concrete breakers, pokers, percussive hammers and compactors.

**Grinders and other rotary tools**
Polishers, burring tools, pedestal and rotary grinders

**Forestry and wood machinery tools**
Chain-saw, brush cutters, circular saws, electric screwdrivers, mowers, shears, Strimmer’s, barking machines

**Other tools and processes**
Drain suction machines, concrete vibro thickeners, nut runners, pounding machines

The most common symptom seen is “white finger”.

HAV’s can cause:
- Vascular disorders – impaired circulation of blood, blanching (whiteness) of effected fingers and parts of hand.
- Neurological problems – leading to numbness and tingling in fingers and hands. Reduced sensitivity to touch and temperature.
- Muscular problems – leading to reduced grip strength and loss of dexterity.
- Bone and joint problems – these can become painful and stiff. This may affect the hand, joints of wrists and shoulders.

The management of Health and Safety at Work Regulations 1999 put duties upon employees and employers. Namely:

**Regulation 3** - requires the employers to assess the risks and control the risks
**Regulation 5** - require health surveillance if appropriate techniques available
**Regulation 8** - require employees to be supplied with information, instruction and training on the nature of risks, signs and symptoms and action to take to minimise this potential risk

The control of vibration at work regulations requires all employers to have health surveillance in place where people are being at risk. Health surveillance must be in place for employees who are exposed above the action value (2.5m/s A (8)) and for employees who are sensitive to vibration to minimise the risk of the disease progression.
Health Surveillance for HAVS
Health surveillance for HAVS should be carried out by competent persons and who received training in HAVS assessments. SheaOH staff has completed the Faculty of Occupational Medicine HAVS course.

The health surveillance has been simplified to encompass a “tiered approach”.

Tier One: Initial or baseline assessment
This comprises of a HAVS questionnaire to be used for employees who are about to start working with vibrating tools. If the resulting questionnaire indicates a potential HAVS condition, this would require referral to Tier Three.

Tier Two: Annual (screening) questionnaire
In the absence of HAVS health issues being declared at Tier One, a HAVS questionnaire should be administered at twelve monthly intervals. Again, if the resulting questionnaire indicates a potential HAVS condition, this would require referral to Tier Three.

Tier Three: Assessment by a qualified person.
This involves a HAVS health assessment by a suitably qualified Occupational Health professional. A further questionnaire is completed by the employee at this stage which asks relevant questions regarding their medical history, social/leisure pursuits and family health issues. This is assessed and some basic screening tests are undertaken if these results indicate a likelihood of HAVS, then a referral to an Occupational Health Physician, Tier Four, is recommended.

Tier Four: Formal diagnosis
The employee will be seen and examined by an Occupational Health Physician. A formal diagnosis may be made at this stage, indicating the extent of the condition by “staging” under the Stockholm Workshop Scale of 0 to 3. It is at this stage, depending on the diagnosis and staging that reporting under the RIDDOR 1995 regulations will be recommended.

Tier Five: Use of standardised tests (optional)
The Occupational Health Physician may recommend that a referral for Objective Testing is made.