

# Vibration and Control of Vibration at Work Regulations 2005

## Vibration and health effects

The health effects associated with exposure to vibration are complex and affect the hands, fingers, wrists, arms and even shoulders. Symptoms are sometimes difficult to detect but may involve 'pins and needles' which begin in the finger tip. This is the result of nerve damage and is irreversible. Those affected may have problems picking up small objects, or for example doing up buttons.

Some people experience pain in their hands in cold weather. Their hands may go white and become very painful and in severe cases this can be very debilitating. This happens as a result of damage to blood vessels. Health effects may also relate to gripping tools and the nerves in the wrist are affected and the person may have weakened grip strength and develop problems holding things. In advanced cases the person may have difficulty holding and gripping tools at work. At home they may have difficulty picking up small objects

Another effect is fingers going white and painful as a result of damage to the blood supply. Pain in the wrists, upper arms and shoulders as a result of damage to ligaments and the 'soft tissue' structures.

The effects on everyday activities in advanced cases are difficulty doing up shirt buttons, difficulty picking up small objects, or even cutting up food. Some people experience pain in their hands in cold weather and difficulty holding and carrying things.

## Vibration – Control of Vibration At Work Regulations 2005

### Control of Vibration At Work Regulations

- Assess the risk to employees from activities involving exposure to hand held vibrating tools
- Take action to reduce risks by considering a range of control measures

### Programme of Risk Management

- Identification of work processes which involve low (below 2.5m/s<sup>2</sup>A<sup>8</sup>) exposure, medium exposure, (between 2.5/ms<sup>2</sup>A (8) ) and high exposure (above 5.0/ms<sup>2</sup> A<sup>8</sup>)
- Vibration assessments
- Recording and sources of data
- Current tool use and exposure times
- Training and advice on risks created by vibration
- Provision of health surveillance by appropriately accredited Faculty of Occupational Medicine practitioners and regular reviews for those with symptoms or health effects
- Appropriate PPE
- Reduction of exposure where identified by health surveillance

### Managing vibration risk

- Consider high risk activities or tools involving vibration exposure
- Consider tool maintenance programmes
- Rotation of activities and employees
- Technical
- Environmental
- Ergonomic
- Devise Action Plan
- Review

### Health Surveillance Programme

The health surveillance programme for Hand Arm Vibration should be planned, designed and overseen by a competent health practitioner within an agreed framework of risk management measures, policy and management processes. Both employees and managers will need information about the purpose, aims and objectives of the programme. These are to detect symptoms and health effects and report on current control measures and assist with management of risk. It is important to involve an experienced health practitioner from the beginning to assist in setting up the programme.

Employees exposed to 2.5 ms<sup>2</sup>/ A (8) and above should be included in a health surveillance programme. Analysis of data provided by employees regarding current and past exposure to vibration, general occupational history and current work processes and practices will be used to inform the overall project plan for health surveillance.

**SARSEN | HEALTH**

Workplace Health Management



# Sarsen Health Tiered Approach

## Level 1 – Responsible person:

It is important that at least one baseline assessment is obtained by the specialist health practitioner, or there is likely to be significant under-reporting of symptoms.

Following the initial baseline assessment by a competent registered health practitioner a 'responsible person' can be trained to assist with the programme and be the first person to whom symptoms are reported. This person may, following the initial programme, collect the subsequent health questionnaires for those individuals who have not reported abnormal health effects or symptoms following the initial baseline assessment.

**Level 2/3 – Qualified person:** This person is a registered health practitioner qualified to carry out a clinical assessment and enter a presumptive diagnosis of Hand Arm Vibration Syndrome. A questionnaire is completed and if necessary a range of tests carried out.

**Level 4 – Qualified Medical Practitioner:** The person to whom all cases of significant presumed Hand Arm Vibration Syndrome will be referred for advice on Fitness to work and definitive diagnosis.

**Level 5 – Standardised Test:** Objective tests carried out in specialist test centres, not used routinely in health surveillance but maybe advised to support the diagnosis where the employee maybe re-deployed or maybe unable to continue working.

## Review and Recall

This will depend on the severity of health effects and symptoms, some people will need to be seen every six months, some yearly and others may complete a paper questionnaire and return it in confidence to the registered health practitioner, being seen every 3 years.

## Health Education

The programme includes providing people with health promotion information in order for them to take responsibility for their health and report symptoms and concerns about control measures.

## Stockholm Scale

### Stage 1

Some symptoms or health effects noted generally agreed to earlier to consider removing person from exposure subject to: monitoring, review, reduction in exposure to tool use.

### Stage 2

A wide range of disease within stage 2 and any progression of symptoms is of concern! Removal of employee from exposure is advised in later stages.

### Stage 3

No cases to progress to stage 3 but likely to be some 'legacy' cases for some organisations.

## Case Management

In line with the current HSE guidelines those identified as having some health effects or symptoms which are likely to be related to exposure to vibration will need to be case managed. This means following up on their symptoms and regular review and monitoring by the specialist health practitioner.

