

## Hand Arm Vibration Syndrome – know the risks

**What is Hand Arm Vibration Syndrome (HAVS)?** Hand Arm Vibration Syndrome (HAVS) is a serious health condition caused by regular and frequent exposure to hand-arm vibration. This often occurs through the use of power tools, machinery, and equipment that produce vibration, such as impact wrenches, grinders, and drills. Prolonged exposure can lead to reduced blood flow, nerve damage, and a range of debilitating symptoms.

### Key Statistics

- Approximately 1.5 million people in the UK are at risk of HAVS.
- Around 2,000 new cases are diagnosed each year.
- Early detection is crucial to prevent long-term damage.

### Symptoms of HAVS

Symptoms of HAVS can progress through three stages and may vary from person to person:

1. Early Symptoms:
  - Tingling and numbness in the fingers.
  - Loss of grip strength.
  - Cold sensitivity (Raynaud's phenomenon), where fingers turn white or blue when exposed to cold.
2. Moderate Symptoms:
  - Persistent numbness.
  - Difficulty in gripping and holding objects.
  - Pain or discomfort in the fingers and hands.
3. Severe Symptoms:
  - Permanent numbness.
  - Frequent attacks of cold sensitivity, even in warm conditions.
  - Possible permanent damage leading to loss of function in hands and fingers.

### The Impact of HAVS

HAVS can significantly impact an individual's quality of life, leading to difficulties in performing everyday tasks, job-related challenges, and psychological distress. In severe cases, it may necessitate changes in employment or even early retirement.

Early recognition of symptoms is crucial. If left untreated, HAVS can lead to long-term disability. Workers should report any symptoms to their supervisors immediately.

### Vibration Exposure Action and Limit Values

According to the regulations, there are specific exposure action values (EAVs) and exposure limit values (ELVs) for hand-arm vibration:

- EAV: 2.5 m/s<sup>2</sup> (daily exposure over an 8-hour period).
- ELV: 5.0 m/s<sup>2</sup> (daily exposure over an 8-hour period).

When workers are exposed to vibration levels at or above the EAV, employers must take action to reduce exposure. If levels reach the ELV, exposure must be reduced to below this limit.

### Prevention and Control Measures

#### Engineering Controls

1. Tool Selection:
  - Choose low-vibration tools wherever possible.
  - Regularly maintain tools to minimize vibration output.
2. Vibration-Damping Equipment:
  - Use anti-vibration gloves and padded grips to help reduce exposure.

#### Administrative Controls

1. Work Practices:
  - Limit the duration of exposure to vibrating tools. Implement job rotation where feasible.
  - Encourage regular breaks to allow blood circulation to the hands.
2. Monitoring and Review:
  - Regularly monitor vibration exposure levels and review work practices to ensure compliance with regulations.

#### Health and Safety Training

- Conduct training sessions to raise awareness about HAVS and its symptoms.
- Teach employees the proper use of tools and techniques to minimize vibration exposure.

#### Recognizing Symptoms Early

Workers should be encouraged to report any early symptoms of HAVS. Early intervention can prevent progression to more severe stages. Employers should foster an open environment for discussing health concerns without fear of reprisal.

#### What to Do if Symptoms Occur

1. Report Symptoms: Inform a supervisor or health and safety representative.
2. Seek Medical Advice: Early medical intervention can help manage symptoms and prevent further damage.
3. Follow Workplace Procedures: Adhere to established procedures for reporting and managing HAVS.

