

CONTROL OF HAND ARM VIBRATION HEALTH AND SAFETY POLICY

Date	Purpose of Issue/Description of Change	Equality Impact Assessment Completed
1 st April 2011	Initial Issue	
3 December 2019	Reviewed and approved by the Health, Safety and Emergency Management Task Group	21 st October 2019
25 th January 2024	Reviewed and approved by the Health, Safety and Emergency Management Committee	

Policy Officer	Senior Responsible Officer	Approved By	Date
Head of Health & Safety	University Secretary	Health & Safety Committee	18 th February 2011

This Policy will be next reviewed in 2027

1. INTRODUCTION

Hand-Arm Vibration Syndrome (HAVs) is a condition that has the potential to affect workers who use powered hand-held or hand-guided tools as a major part of their job. Workers whose hands are regularly exposed to high vibration levels may suffer from several ill health effects to the hands and arms. This could include impaired blood circulation and damage to the nerves and muscles which may be felt as a tingling or numbness in the fingers. There are also other names for the condition, including 'vibration white finger', 'dead finger' and secondary Raynaud's Syndrome.

The primary cause of HAVs is work involving holding vibrating tools or work pieces. The risk depends on the magnitude of the vibration and how long an individual is exposed to it. Other aspects that can have an affect are the grip, push and other forces used to guide and apply vibrating tools or work pieces, the pattern of exposure, how much of the hand is exposed to the vibration, temperature, smoking habits and individual susceptibility.

2. POLICY STATEMENT AND SCOPE

It is the policy of Bangor University, so far as is reasonably practicable, but in accordance with the relevant statutory requirements and good practice, to ensure the health and safety of staff, students and visitors to the University.

This Policy details the requirements placed on Colleges and Professional Services to control and manage the risks associated with the use of vibratory hand tools and equipment.

The Policy applies to:

- Each College and Professional Service that operates vibratory hand tools and equipment.
- Staff operating vibratory hand tools and equipment.
- Students operating vibratory hand tools and equipment.

The Policy does not apply to:

- Contractors.

3. RELATED POLICIES AND LEGISLATION

In addition to the general duties of the Health and Safety at Work etc. Act, the management and control of vibration risks associated with the prolonged use of holding vibrating tools and equipment is governed by The Control of Vibration at Work Regulations 2005.

The use of vibratory hand tools and equipment that fall below the Exposure Action Value and Exposure Limit Value specified by this Policy must still be risk assessed in accordance with the University's Risk Assessment Policy and procedures.

4. DEFINITIONS / TERMINOLOGY

The Control of Vibration at Work Regulations specifies two levels of exposure which apply to the control of hand arm vibration and with which the University must comply. For the purpose of this Policy the following terms and definitions apply:

- Exposure Action Value (EAV) 2.5 m/s^2 [averaged over 8 hours A(8)]: Daily amount of hand arm vibration exposure above which employers are required to take action.
- Exposure Limit Value (ELV) 5 m/s^2 [averaged over 8 hours A(8)]: The maximum amount of hand arm vibration an employee may be exposed to on any single day and which must not be exceeded.

- Vibration: Move with small movements rapidly to and fro. Hand-arm vibration is vibration transmitted to hands and arms when using hand-held powered work equipment.

5. DUTIES OF THE UNIVERSITY

Through this Policy the University establishes clear objectives and standards for the management and control of the use of vibratory hand tools and equipment at work. The University has:

- a. Put systems in place to, as far as is reasonably practicable, control and reduce the risk of exposure to vibration.
- b. Where the prevention of exposure to vibration is not possible, put systems in place to ensure exposure is kept as low as reasonably practicable and in accordance with the Regulations.
- c. Provided Health Surveillance for staff who use vibratory hand tools and equipment as a significant part of their work and as required by the risk assessment.

The University also seeks to ensure students are not exposed to potentially harmful levels of vibration exposure, as defined by the Exposure Action Value (EAV) and Exposure Limit Value (ELV).

6. COLLEGES AND PROFESSIONAL SERVICES RESPONSIBILITIES

Each College and Professional Service is responsible for managing work involving the use of vibratory hand tools and equipment, identifying those at particular risk, assessing associated risks and where necessary, taking action to avoid or control those risks. Colleges must ensure students are not exposed to potentially harmful levels of vibration exposure, as defined by the Exposure Action Value (EAV) and Exposure Limit Value (ELV).

Where there is potential for staff to be at particular risk, Colleges and Professional Services must:

- a. Carry out a suitable and sufficient risk assessment using the Health and Safety Executive's Vibration Exposure Calculator and the HSE Ready Reckoner ('points' system) to assess the level of exposure.

(**Note:** When undertaking a vibration risk assessment it is advisable to consider the impact of other sources e.g. another job and the risk from 'noise' as the two are usually connected. Further information on Noise Risk Assessments available at www.hse.gov.uk/noise).

- b. Document the controls needed to ensure the health and safety of staff, developing safe systems of work and procedures as necessary.
- c. Communicate the findings of risk assessments and control measures and safe systems of work, to staff.
- d. Arrange Health Surveillance for existing and new staff using vibratory hand tools and equipment, as detailed in the Action Levels and Health Surveillance sections below.

Colleges and Professional Service must also:

- e. Provide suitable training, instruction and information on vibratory hand tools and equipment, symptoms and prevention to all relevant staff and students.
- f. Purchase/hire equipment with the lowest vibration level, where practicable.

(**Note:** New equipment will have a Vibration Magnitude score, which includes details of exposure times).

- g. Set up systems to ensure vibratory hand tools and equipment are maintained, with defective equipment removed from use until remedial work is undertaken.

- h. Provide appropriate Personal Protective Equipment (PPE) to those using vibratory hand tools and equipment, e.g. gloves to keep hands warm.
- i. Regularly review systems and procedures.

7. ACTION LEVELS

The guide below must be used in conjunction with the HSE's Ready Reckoner ('points' system) where exposures for different combinations of vibration magnitude and exposure time are given in 'points' instead of values in $m/s^2 A(8)$.

Exposure Action Value (EAV)	Where 100 (2.5 m/s^2) points is exceeded in any day, Colleges / Services must consider the work involved and introduce controls and plan the work to reduce risk and exposure to the lowest practical level. Health Surveillance must be carried out on staff likely to exceed 100 points per day.
Exposure Limit Value (ELV)	Where a level of 400 points (5 m/s^2) can be exceeded in any day, the College / Service must stop the work and undertake a detailed investigation into the reasons for this exposure. Measures to reduce the exposure to below the ELV must be identified and implemented.

8. HEALTH SURVEILLANCE – Existing and New Staff

Colleges / Professional Services must identify all staff who are at particular risk from the use of vibratory hand tools and equipment and notify the Occupational Health Practitioner of these staff. The Occupational Health Practitioner will undertake Health Surveillance (Tiers 1 - 3), with further health assessments carried out by a suitable Occupational Physician.

Colleges / Professional Services must arrange Pre-exposure Baseline screening (Tier 1) for all new and existing employees taking up work that involves exposure to vibration over the EAV.

Health Surveillance monitoring is undertaken as follows:

TIER	REQUIREMENT
Tier 1	Pre-exposure Baseline questionnaire for staff who will use vibratory equipment (see H&S Website for Tier 1 Form).
Tier 2	An additional questionnaire to be completed annually by the individual (see H&S Website for Tier 2 Form).
Tier 3	An assessment by the University's Occupational Health Practitioner.
Tier 4	Further monitoring carried out by a qualified Physician.
Tier 5	Further referral to evaluate potential symptoms.

9. STAFF AND STUDENT RESPONSIBILITIES

Staff and students must:

- a. Participate where required in the development of risk assessments associated with the use of vibratory hand tools and equipment.
- b. Follow all risk assessments / safe systems of work and training as identified by their College / Service, including wearing of appropriate PPE.
- c. Report defective equipment immediately.
- d. Report symptoms associated with HAVs etc to their Supervisor / Line Manager as soon as possible.
- e. Participate in appropriate Health Surveillance, as required.

10. EQUALITY ASSURANCE

Every effort must be made to support individuals so they are treated equally. However, in some instances, there may be a requirement to treat '*persons with a protected characteristic*' and those who have symptoms of HAVS differently in order to safeguard their health, safety and well-being if operating equipment where exposure to high levels of vibration could be a risk to themselves. Such would normally only be done in accordance with medical and/or occupational health advice.

11. FURTHER INFORMATION

In addition to the information found in this Policy more practical and procedural guidance can be found on the Health and Safety Website.

12. REVIEW AND AUDIT PROCEDURES

Health and Safety, Campus Services, may undertake periodic audits or reviews to assess the effectiveness of and compliance with this Policy.

Colleges / Professional Services must periodically review their own procedures to ensure the requirements of this Policy are implemented, suitable and effective.

The Health, Safety and Emergency Management Committee will review this Policy in accordance with the agreed Review Schedule, with any significant changes considered by the University Executive.

End.