CORPORATE PROCEDURE

HAND ARM VIBRATION

1 Aims of the Procedure

The aim of this Corporate Procedure is to prevent or adequately control the exposure to Hand Arm Vibration (HAV). In doing so it will act to provide the following benefits to Neath Port Talbot County Borough Council (NPTCBC) and its employees: -

- Safer working environment
- Legal compliance
- Reduced absence

2 Responsibilities

2.1 Corporate Directors

Corporate Directors shall be responsible for the overall implementation of this Corporate Procedure.

2.2 Heads of Service

Heads of Service shall be responsible for the day-to-day implementation of this Corporate Procedure and will ensure the provision of the necessary resources to ensure a safe system of work, comply with the requirements of the policy and the regulations.

2.3 Governing Bodies of Schools Maintained by Education Authority

There is a shared overall responsibility for health, safety and welfare between the LEA, governing body and headteacher.

2.4 Managers/ Team Leaders/Headteachers

Managers/ Team Leaders/ Headteachers are responsible for ensuring the implementation of this corporate procedure within their workplaces to comply with management guidance.

2.5 Occupational Health Unit

The Occupational Health Unit (OHU) shall conduct pre-employment and employment HAVS screening for at risk groups. HAVS screening shall be carried out annually following an initial baseline reading on recruitment or commencement of duties in roles where they may be exposed to significant vibration levels.

2.6 Corporate Health & Safety Section

The Corporate Health & Safety Section shall provide advice and guidance on operational HAVS concerns. Initially all hand held vibrating equipment shall be HAVS tested and the results communicated via risk assessment.

2.7 Employees

Each employee of the Authority shall: -

- Take reasonable care to ensure their safety and that of others and adhere to the Authority's Policy on managing the risk of exposure to hazardous substances.
- Adhere to Risk Assessments carried out and control measures required while operating hand held equipment.
- Inform their managers of any change in their health status which may be affected by the use of hand held equipment.
- Use appropriate controls where provided for a task in order to avoid or reduce the risks. The controls should be used in the manner in which the employee has been instructed and for its intended purpose.
- Co-operate with Managers / Team Leaders to ensure they have attended the necessary training. Adhere to the information given and convey relevant information to other colleagues where necessary.
- The employee has the right to refuse to carry out (according to the Management of Health and Safety at Work Regulations (MHAWR)), a task where the potential risk of injury is likely and unreasonably high; and where the risk could reasonably and practicably be avoided by the provision of training, instruction, information, supervision and appropriate resources.
- Comply with the Authority's accident and hazard reporting procedures in all cases involving injuries, incidents or near misses affecting themselves, other colleagues, service users or non-employees.

3 Risk Assessment

3.1 In accordance with the Management of Health and Safety At Work Regulations Managers/Team Leaders/Headteachers must ensure a risk assessment is carried out by a competent person in order to assess risks caused by working with high vibration equipment and to take measures to control these risks, so far as is reasonably practicable.

3.2 Where the risk assessment indicates that an employee's daily vibration exposure regularly exceeds the Exposure Action Value (EAV) of 2.5m/s^2 A(8), and the risks from HAVS are not adequately controlled then a programme of preventative measures and health surveillance must be introduced.

3.3 Detailed below is information and the action Managers/Team Leaders/ Headteachers can consider taking, bearing in mind that appropriate measures must also be taken to protect the health and safety of the employee even if the exposure is below the EAV of 2.5m/s^2 A (8):-

- Identify if there are any tools and/or processes with the potential to cause HAV.
- Where a potential of HAV has been identified a risk assessment shall be carried out to determine the significance of this risk.
- Controls to minimise the risk of HAVS will need to be introduced where there is regular, prolonged use of tools or processes likely to be hazardous or where it is known that vibration exposure will exceed the EAV of 2.5m/s2. Refer to the 'Control Measures' section below for a hierarchy of preventive measures to be adopted.
- Devise and implement formal safe systems of work, based on the results of the risk assessment and in consultation with those employees affected, to control the risks from HAV.
- Ensure employees receive suitable and sufficient training on the risks of HAV and safe systems of work and how to recognise and report possible symptoms.
- Arrange health surveillance for all workers in jobs identified as having a significant risk of HAV i.e. exposed to> 2.5m/s2 over an 8 hour working day.
- Adopt a 'Low Vibration Purchasing Policy' as detailed below.
- Investigate the causes of any confirmed cases of HAVS and take appropriate action to prevent recurrence.

- Review the control measures annually or when any significant changes take place to ensure they remain effective.

4 Actions for Managers/ Team Leaders

If the work means that high vibration levels may be putting employees at risk, Managers/Team Leaders must consider taking action to help control the risk.

The most effective course Managers/Team Leaders can take is to reduce the vibration.

Effective ways of doing this are as follows: -

- Before deciding which equipment to purchase ask about vibration levels, where available field test data should be used. Where possible, choose low-vibration equipment.
- Consider whether the job could be done without using high-vibration equipment.
- Provide equipment designed to minimise vibration.
- Maintain equipment in good condition, for example, no loose or worn out parts.
- Make sure employees use the right equipment for the job.
- See whether the job can be altered to reduce the grip and pressure that the employee needs to apply.
- Provide employees with adequate information, instruction and training.

Actions for Employees

Employees must play their part in reducing the risk of developing HAVS especially if they have to keep using high vibration equipment. Some effective ways of doing this are as follows: -

- Tell the Manager/ Team Leader about any equipment that produces a high level of vibration, so that the risks can be properly assessed.
- Keep up blood flow in the fingers while working:
    - Do not smoke or at least cut down just before or while working because smoking affects blood flow
    - Keep warm at work, especially your hands. Wear warm gloves and extra clothing if you work in the cold.

- Exercise hands and fingers to improve blood flow.

- Ensure you are using the right equipment for the job. Making do with the wrong equipment can lead to more vibration, or that you have to grip the tools more tightly.
- Do not use more force than necessary.
- Try to avoid periods of using equipment without a break – short bursts are better.
- Keep tools in good working order – if they are in bad condition, ask the Manager/Team Leader to get them repaired.
- Where reasonably practicable, share high risk tasks with other employees to reduce the time of exposure.
- Take an active part in any health and safety training courses you are required to attend.

Do not ignore symptoms. If employees feel vibration could be affecting their fingers or hands they must stop work and report the matter to their Manager/Team Leader immediately. He/she will arrange for the employee to be referred to the Occupational Health Unit (OHU).

Control Measures

Where a risk of developing HAVS has been identified a preventive programme should be implemented. The following hierarchy of control measures aims to minimise the risk of injury:

- look at alternative ways of working which eliminate the need to use vibrating equipment altogether;
- substitute the task or process with one that involves less vibration i.e. replacing a hand-held concrete breaker for a JCB with a pneumatic hammer drill attachment;
- use tools designed for low vibration, for example chain-saws with anti-vibration mountings and tools with vibration-isolating handles;
- maintain and service equipment effectively according to the manufacturer's instructions and implement effective fault reporting procedures;
- avoid uninterrupted exposure to vibration over long periods of time. It is better for work to be arranged so that periods of exposure are broken by periods of work which do not involve vibration e.g. job rotation;

- make arrangements to reduce the grip, push and other forces which the worker must apply, for example use supports for tools and work pieces and make sure processes and equipment are ergonomically designed;
- train, inform and supervise employees to ensure they are aware of the hazard, the safe working procedures to be followed which minimise risk and how to recognise and report signs of injury;
- select tools that are suitable for the task at hand;
- provide personal protective equipment to help employees keep warm and maintain good blood circulation (see below).

Note: Wearing gloves may help, but so-called 'anti-vibration gloves are not normally effective to reduce vibration exposure. In most cases they do little, if anything to reduce vibration reaching the hands and can even increase it. They may also impair the ability of employees to control the equipment. Gloves should therefore be chosen for their ability to keep hands warm and to protect them from accidental injury.

Maintaining Blood Circulation

Keeping the hands and body warm will help to maintain good blood flow to the fingers and reduce the risk of injury. Where people have to work in cold conditions, specific measures might include:

- wearing gloves (NB gloves will help to keep the hands warm but are not effective in reducing the amount of vibration reaching the hands);
- using proprietary heating pads to keep hands warm;
- using tools with heated handles;
- avoiding pneumatic exhausts which discharge towards the workers hands (a flexible hose to lead exhaust away might also help with noise control);
- arrangements to allow workers to warm up before starting work, and if necessary to help them keep warm, such as a shelter for outdoor workers to use during rest breaks;
- wearing warm, weatherproof clothing for work in cold or wet areas;
- avoiding or cutting down smoking; and massaging or exercising fingers during rest breaks.

Health Surveillance

Even when preventive measures have been taken, some employees may remain at risk where high-vibration equipment is used for long periods and particularly when the vibration exposure level regularly exceeds 2.5m/s^2 A (8). In these circumstances, apart from the preventive measures that must be taken, Managers/ Team Leaders must also ensure employees are included on the NPTCBC Health Surveillance Programme. This will enable employees showing signs of injury to be medically assessed and advised about continuing to work with high-vibration tools/equipment.

Access to the NPT Health Surveillance Programme is via the Corporate Health and Safety Section.

A health surveillance programme will typically include the following elements:

Managers/ Team Leaders shall arrange for all employees who use vibratory equipment to complete the 'Health Surveillance Questionnaire' CF/16a/01. On completion these forms shall be forwarded to the OHU.

Employee Pre Employment Screening

The OHU will screen employees for symptoms of HAV or other medical conditions which may restrict or prohibit work with vibrating equipment prior to employment.

Advice from the OHU will be considered when making offers of employment. Where appropriate all practical adjustments will be made to accommodate any restrictions identified.

Employment Screening

Managers/ Team Leaders shall arrange for all employees who work or have previously worked with vibratory equipment to complete the 'Health Surveillance Questionnaire' CF/16a/01. On completion these forms shall be forwarded to the OHU.

Equipment and Materials

Purchasing/Leasing/Hiring Equipment

Before buying, leasing or hiring equipment, consider if there are alternative ways of working without using vibrating equipment. If this is not practicable, then a 'Low Vibration Purchasing Policy' must be adopted. The Corporate Health & Safety Section are available to advise on the purchase of suitable equipment.

Manufacturers are required to identify the vibration levels of their products, however, this data needs to be interpreted carefully. The manufacturers' data (obtained in laboratory conditions) should only be seen as a guide because vibration levels at work can vary widely and may be much higher than the quoted figures. Even equipment with vibration reported as 'less than 2.5 m/s^{2}' may not be without risk when used under working conditions. Be aware that when vibration controls are fitted to equipment, the equipment's efficiency may be reduced. If this means the equipment is used for longer periods of time then this may negate any advantage gained by the vibration controls.

Low Vibration Purchasing Policy

Always consider alternative ways of working without using vibrating equipment. If this is not reasonably practicable then each Directorate shall aim to **purchase, lease or hire** the lowest vibration equipment that is suitable for the job. To determine this, the following steps should be taken:

- check equipment manufacturers' literature for standardised laboratory test vibration levels and warnings of vibration hazard;
- shortlist the equipment with the lowest levels of vibration for further consideration;
- go back to the suppliers and ask for further information on vibration levels at work for the shortlisted equipment. Make sure this information is relevant to the type of work you intend to use the equipment for;
- check whether any vibration controls have reduced the equipment's efficiency; finally;
- arrange for the Corporate Health and Safety Section to carry out an independent test of the equipment chosen in work conditions before deciding to proceed.

Maintenance Procedures

All Directorates shall ensure that all equipment they operate is properly maintained and, that employees are advised on the need to inspect all equipment including any specific checks needed to manage the risk of vibration prior to use and note, report and repair or replace any equipment which demonstrates excessive and abnormal vibration in regular use. Under the Provision and Use of Work Equipment Regulations records of inspections should be recorded and retained in a safe place.

Equipment testing

The Corporate Health & Safety Section will assess the equipment in use and will prioritise site validation tests to determine actual vibration levels in use.

Equipment Registers and Auditing

The Corporate Health & Safety Section will put in place an equipment register that identifies all items of equipment with the potential to give rise to excessive vibration in normal use. This register will identify the equipment by Type, Manufacturer and Model. The record will also show the Field Test Data with respect to vibration levels and details of the maximum daily permitted use for a normal employee in minutes. Further data relating to actual measured vibration levels and exposure times will also be assessed and recorded. It is essential that all departments ensure a thorough audit of equipment is prepared.

Operational Vibration Control

General

All employees will have access to equipment listings. The list will be colour coded and contain the classification system, relevant to that piece of equipment.

It will be each employee and Manager/Team Leaders responsibility to minimise exposure through job rotation and the deployment of best practice.

Employees who through medical screening have been identified as having symptoms of the disease or other medical conditions, which may give a predisposition to the disease, may have extra restrictions with regard to exposure placed upon them. All such employees will be individually counselled and instructed on levels of exposure and control measures.

Employees who are subject to health or medical surveillance under these regulations must co-operate with all reasonable requests for information whether of a medical nature or not and must attend appointments made for such surveillance activity. All appointments will be during working hours and at the expense of the employer.