University Occupational Health and Safety Standard VIBRATION

1. PURPOSE

The University is committed to meeting its legal obligations by ensuring that it has adequate arrangements, facilities and trained personnel to reduce the risk of injury or ill health from exposure to vibration whilst undertaking University activities.

This document sets out the minimum requirements to control risk associated with vibration at the University of Strathclyde, in order to comply with relevant legislative obligations and University requirements.

2. SCOPE

This document applies to all staff, post graduate students and visitors (for example visiting academics) who either work with vibrating equipment or work in areas where vibrations may be experienced, or have managerial responsibilities for such activities at the University of Strathclyde.

3. ABBREVIATIONS

DSC	Departmental Safety Coordinator
EAV	Exposure Action Value (Daily)
ELV	Exposure Limit Value (Daily)
HAVS	Hand-Arm Vibration Syndrome
HAV	Hand-Arm Vibration
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrence Regulations
SHaW	Safety, Health and Wellbeing
SIRIS	Strathclyde Incident Reporting and Investigation System
WBV	Whole Body Vibration

4. DEFINITIONS

4.1 **Exposure action value –** the level of daily personal vibration exposure that, if reached or exceeded, require specified action to be taken to reduce risk. The daily exposure action value is 2.5m/s^2 for HAVs and 0.5m/s^2 for WBV.

4.2 **Exposure limit value** - the level of daily vibration exposure which must not be exceeded. The daily limit value is 5m/s^2 for HAVs and 1.15m/s^2 WBV.

4.3 **Hand-arm vibration –** the mechanical vibration which is transmitted into the hands and arms during a work activity.

4.4 **Near Miss –** An event or situation that could have resulted in exposure to a hazardous level of vibration but did not do so.

4.5 **Vibration –** The movement of an object caused by a mechanical force which results in a back and forth motion.

4.6 **Whole body vibration -** mechanical vibration, which is transmitted to the body, when seated or standing, through the supporting surface, during a work activity.

5. ROLES AND RESPONSIBILITIES

The University OHS Standard for Roles, Responsibilities and Accountabilities document defines the roles, responsibilities and accountabilities necessary to implement the Occupational Health, Safety and Wellbeing Policy statement at each level of the organisation.

The roles and responsibilities specifically in relation to the management of vibration are detailed as follows:

5.1 Executive Officers and Faculty Deans

Responsible for performance monitoring of this Standard within their area of responsibility including the University's significant partnerships, collaborations and wholly owned companies. They must ensure that departments are resourced such that this Standard is fully implemented.

5.2 Heads of Department/Heads of School/Professional Services Directors

Responsible for ensuring compliance with this Standard throughout their area of responsibility through provision of adequate resources and performance monitoring. The DSC or other nominated person(s) will assist them to carry out delegated tasks as deemed appropriate. Specifically, they will ensure:

- Appropriate management, administrative and technical arrangements are in place to effectively control risks arising from activities involving vibration and ensure that these are regularly reviewed.
- Activities involving vibration are identified within the department and have been risk assessed and significant findings are recorded;
- Appropriate plans are established to control newly identified sources of vibration.
- A person(s) is nominated to coordinate the programme of occupational hygiene monitoring and health surveillance where required, and this programme is monitored, maintained and reviewed.
- Where a formal programme of vibration monitoring is required, that this is implemented effectively.
- Engagement with SHaW regarding the Occupational Hygiene Programme;
- Engagement with the Occupational Health Service regarding recommended health surveillance.
- Mechanisms are in place to monitor, audit and review OHS performance in relation to vibration.
- Incidents (including near misses) are reported and investigated appropriately with corrective action taken where required.

5.3 Departmental Safety Coordinator

The Departmental Safety Coordinator (or other nominated person) is responsible for ensuring that:

- Line Managers/Principal Investigators/Academic Supervisors implement the requirements of their risk assessments.
- Information in relation to the implementation of this OHS Standard is made available to SHaW for audit purposes as required.
- Where vibration monitoring is required, maintain an Occupational Hygiene Monitoring Programme, liaising with the Line Managers/Principal Investigators/Academic Supervisors and SHaW to co-ordinate advice and visits from the Occupational Hygienist.
- Where health surveillance is required, liaise with Occupational Health Service to establish a surveillance programme, keep records of personnel who have attended and where recommendations are made by Occupational Health Service to co-ordinate any action as necessary.

5.4 Line Managers/Principal Investigators/Academic Supervisors

Responsible on a day-to-day basis for ensuring that risks associated with vibration at work are managed within their area of responsibility. Specifically, they will ensure:

- Working safely with vibrating equipment is considered as part of work planning.

- Departmental safety arrangements are implemented within their area of responsibility as they apply to the work being done.
- An up-to-date knowledge of the risks associated with the work under their control is maintained.
- The identification and assessment of the risks to personnel under their supervision / management from possible exposure to hazardous vibration.
- All equipment that is a source of vibrations is maintained in good working order to minimise the potential for exposure to vibration.
- Occupational vibration monitoring is arranged through SHaW, via the DSC (or another nominated person).
- Recommendations / additional control measures identified by the Occupational Hygienist as a result of monitoring are implemented, including the requirement for health surveillance.
- Appropriate controls are provided if exposure to vibrations cannot be reduced sufficiently by using other methods.
- Where equipment is provided to reduce exposure to vibrations, the provision of suitable storage and regular checks and maintenance of the protection.
- Spot checks are undertaken on equipment provided for protection from vibration, where necessary.
- Legal limits on vibration exposure are not exceeded;
- The provision of adequate information, instruction and training.

5.5 Safety, Health and Wellbeing

In relation of this OHS Standard, SHaW are responsible for:

- Setting the requirements of this Standard and reviewing at appropriate intervals.
- Liaising with the Occupational Hygienist to discuss department needs and to arrange vibration monitoring when required.
- Liaising with departments to arrange vibration monitoring based on their needs.
- Co-ordinating the dissemination of the occupational hygiene report from the Occupational Hygienist to departments and to the Occupational Health service.
- Liaising with the Occupational Health service where health surveillance is recommended as an outcome of vibration monitoring.
- Storing occupational hygiene monitoring reports for the necessary retention period.
- Managing the reporting of incidents through SIRIS, including RIDDOR.
- Implementing the Occupational Health and Safety Management System audit to ensure monitoring compliance with this Standard.

5.6 Occupational Hygienist

In relation of this OHS Standard, the Occupational Hygienist is responsible for:

- Assisting HoDs to meet their statutory obligations by providing occupational hygiene monitoring (vibration monitoring) where identified by risk assessment.
- Liaising with SHaW to arrange both scheduled and non-scheduled vibration monitoring for departments.
- Providing the occupational hygiene report to SHaW following vibration monitoring and providing additional information as required.
- Providing information / assessment of potential vibration exposure prior to work commencing and prior to any occupational hygiene monitoring being undertaken.
- Recommending a referral to the Occupational Health Service to discuss health surveillance requirements if there is a risk of significant exposure, or if an individual is vulnerable and may need health surveillance whether exposure is significant or not.

The Occupational Hygienist is an external role made and managed by SHaW.

5.7 Occupational Health Service

In relation to this OHS Standard, the Occupational Health Service is responsible for:

- Assisting HoDs to meet their statutory obligations by providing health surveillance where identified.
- Liaising with departmental staff to implement a programme of health surveillance where required.
- Receiving and reviewing Occupational Hygiene Monitoring reports where health surveillance is recommended.
- Providing information on occupational health related issues.
- Keeping medical records in a suitable form for at least 40 years from the last date of entry.

5.8 All Staff

All workers must:

- Complete all required relevant training for the work being done.
- Ensure that they use all equipment in line with departmental instruction.
- Use protective equipment in line with departmental instruction.
- Ensure the appropriate handling of all safety equipment provided.
- Report defective vibration protective equipment immediately.
- Where appropriate, engage fully in an occupational hygiene monitoring programme and occupational health surveillance where required.

6. THE MANAGEMENT OF VIBRATION AT WORK

At work, there is the potential for certain tasks or equipment to cause the generation of vibrations which can be transmitted through equipment or the environment into the limbs or body of personnel. These vibrations have the potential, if not appropriately mitigated against, to cause harm to the personnel working with the equipment or in the environment.

The following sections provide information on the management of vibration at work. Comprehensive guidance is provided in the HSE publication L140 'Hand-arm Vibration – Guidance on the regulations' and L141 'Whole-body Vibration – Guidance on the regulations'.

6.1 Risk Assessment

Where there is equipment in use that is liable to expose any person to vibration, then this **must** be identified in the relevant general risk assessment. Typical examples of vibration generating equipment that should be considered when undertaking a risk assessment include:

- Hand Arm Vibration
    - Handheld equipment – Drills, Grinders, Reciprocating Saws
    - Hand guided equipment – Lawnmowers, compactors, chainsaws
    - Hand fed equipment – Grinders, forge hammers, chippers.
- Whole Body Vibration
    - Vehicles regularly driven off-road – Tractors, trucks or ride on cutters/mowers
    - Vehicles designed for earth moving – Drilling rigs, excavators.

This is a non-exhaustive list and where there is doubt over the need to include vibration in the risk assessment or whether there is a need to arrange vibration monitoring, guidance can be sought from the DSC or SHaW.

Any risk assessment must be undertaken by a trained and competent person, using the University of Strathclyde eRisk system. The risk assessment must:

- Identify those who may be exposed to vibration in excess of the relevant exposure action level (EAV).
- Include a sound determination of the magnitude and duration of the vibration, and whether the exposure will result in intermittent or continuous shocks.
- Identify where there may be a risk to health to those who may be exposed, and what the risk to health may be, including those whose health is at particular risk from the exposure.
- Identify the effects of vibration on the workplace and others in the area, as well as work equipment, including the proper handling of controls, indicators and the stability of any supporting structures and joints.
- Consider any information provided by the manufacturer.
- Identify the potential for replacing equipment with alternatives designed to reduce vibration.
- Identify the measures necessary to eliminate the risks / exposure, or reduce them to as low as reasonably practicable, including the requirement for personal protective equipment.
- Identify the need for health surveillance (Section 6.7) and consider the information following health surveillance.
- Identify the need for any vibration monitoring that may be required to ensure that the controls in place remain effective (Section 6.5).
- Record the significant findings of the risk assessment.
- Be reviewed at regular intervals and where significant changes occur.

Where exposure to vibration has been considered as part of the risk assessment process, but no action is required, this must still be recorded in the risk assessment.

6.1.1 Vibration Exposure Action Values

The Control of Vibration at Work Regulations 2005 sets a vibration EAV for both hand arm vibration and whole-body vibration, over which action must be taken to eliminate or reduce exposure. The Regulations also prescribe a vibration ELV which must never be exceeded.

The levels are defined in the table below:

	Daily Exposure Action Value (EAV)	Daily Exposure Limit Value (ELV)
Hand Arm Vibration	2.5 m/s^2	5.0 m/s^2
Whole Body Vibration	0.5 m/s^2	1.15 m/s^2

Departments must, as far as Is reasonably practicable, reduce vibration to as low a level as possible. Any planned activity that may expose personnel to levels of vibration in excess of the ELV are not permitted until such action is taken to reduce the levels of vibration to below at least the ELV.

The Occupational Hygienist will advise on vibration monitoring requirements and make recommendations dependent on the results of the monitoring (Sect 6.5 – Occupational Hygiene Monitoring)

6.1.2 Vibration Exposure Monitoring

Once it has been decided that the levels and / or duration of vibration exposure may be at, or near the daily EAV, a sound determination must be made of the actual levels of vibration

that the person will be exposed to. This will detail what action is required to reduce the vibration level or duration of exposure.

To make a sound determination of the level of vibration that persons may be exposed to, information relating to the work being done and information relating to the equipment itself must be reviewed.

1. Work task Information

   Related information may include:

   a. Which tasks expose persons to vibration?
   b. Which persons will be exposed?
   c. What equipment they will use
   d. What work tasks they will use the equipment for?
   e. The total time they are in contact with the equipment whilst it is operating.

   All these details can be obtained by observing the person throughout their workday. This does not need to be for the entire workday, only those periods where they are actively using the equipment of concern, provided this period is representative of the work done using the equipment.

2. Vibration Reference Information

   Examples of this can include:

   a. Other vibration assessments undertaken in your workplace.
   b. Information from the equipment manufacturer (e.g. any built-in anti-vibration features).
   c. Other published documentation from reliable sources.

   If vibration reference information is used to assess the magnitude of vibration, then the determination must provide thorough justification for why this information accurately reflects the level of vibration that may be encountered when using the equipment.

   The Health and Safety Executive provide a “Ready Reckoner” to allow the quick determination of if a work task using a piece of equipment with a known vibration magnitude (m/s^2) over a given length of time for 5 minutes to 6 hours. This ready reckoner can be used as a guide to assist in the determination of the risk presented by a piece of equipment or task and can indicate where work task sharing may allow work to proceed. The ready reckoner can be found in HSE publication L140 ‘Hand-arm Vibration – Guidance on the regulations’

3. Direct Vibration Monitoring

   Where the determination indicates that the level of exposure is likely to be, or will exceed, the EAV, direct vibration monitoring must be arranged to accurately determine the level of vibration that workers will be exposed to.

   An externally appointed Occupational Hygienist carries out vibration monitoring on behalf of the University (Section 6.5). The Occupational Hygienist will conduct measurements for each activity or piece of equipment as identified by the department to determine:

   - An accurate level of vibration being produced, which may differ from the manufacturers information when the equipment is in use;
   - The length of time it will take to reach the EAV and ELV;
   - Whether additional controls are required to eliminate or reduce the risk; and
   - Whether health surveillance is required.

Vibration monitoring can be arranged by completing the Request for Occupational Hygiene Monitoring Form and submitting this to SHaW, who will engage the Occupational Hygienist

Further information on occupational hygiene monitoring can be found in the OHS Standard - Occupational Hygiene

6.1.3 Controlling Vibration Exposure

To ensure that the risks from exposure to vibration are either eliminated or reduced to as low a level as is reasonably practicable (whether or not the EAV is exceeded), consideration should be given to the following at either the planning or review stages:

- Other working methods which reduce exposure to vibration;
- Choice of appropriate work equipment emitting the lowest level of vibration, taking account of the work to be done;
- Provision of clothing appropriate to the environment (e.g. wet weather gear for ground staff)
- The design and layout of workstations with appropriate vibration dampening features;
- Suitable and sufficient information and training for employees, such that work equipment may be used correctly, in order to minimise their exposure to vibration.
- Reduction of vibration by technical means;
- Appropriate maintenance programmes for work equipment, the workplace and workplace systems;
- Limitation of the duration and intensity of exposure to vibration; and
- Appropriate work schedules of work with adequate rest periods.

During the risk assessment process, when deciding on controls to put in place, departments must follow the established hierarchy of control (Guidance Note – Undertaking a Risk Assessment – Section 7) to ensure that the correct approach is taken in reducing the likelihood of harm.

The hierarchy of control for vibration, from most to least effective, is as follows:

Eliminate - Remove the source of vibration entirely. Elimination of the source of vibration is the most effective method of controlling the risk presented by sources of hazardous vibration. This can involve a reassessment of the work process to be done that utilises a different method of achieving the same results without the use of vibration generating equipment or processes.

Substitute - Identify other equipment or a different process to complete the task. When considering equipment for use in a process, departments must consider using equipment that will achieve the same results, but that generate less vibration as a result of their operation. Considering purchasing equipment with lower vibration characteristics can be a simple method of reducing the level of vibration that is likely to be encountered.

Isolate – Design the workstation to be operated remotely where possible. Where this is not possible, design the workstation to include the use of jigs or suspension systems to reduce the need for the operator to tightly grip the equipment. Isolating the operators from the equipment will provide a level of protection.

Engineering - Use engineered measures designed to reduce the vibration. Engineered controls are physical modifications that can be made to equipment to reduce its vibration profile. This includes proper maintenance of devices to ensure they are in good working order. It can also mean the use of vibration mounting plates or anti-vibration handles.

Administrative and Organisational - The use of written arrangements to reduce the exposure to vibration. Administrative controls are written documents detailing the correct

required processes to work with vibrating equipment. This can include written processes, health monitoring, signage and training.

The way that work is planned and organised can affect vibration exposure. Examples of organisational controls include:

- Job rotations and limiting the time spent in operating vibrating equipment.
- Regular maintenance of machinery and equipment is essential as it will deteriorate with age.
- Introducing a positive purchasing and hire policy.

PPE - the provision of equipment designed to reduce exposure to vibration must only be considered when all other options have been exhausted. The use of PPE requires that the risk still be present, and direct protection of the person is required.

When attempting to mitigate the residual risk from vibration, it should be noted that the only PPE that can be issued to workers are anti-vibration gloves. Further information on the use and limitation of these items can be found in Section 6.2.2

For further information on measures that can be taken to eliminate, reduce or directly protect users from the effects of vibration, see the Guidance Document – Hand-arm vibration at work (INDG175) and Guidance Document - Control back-pain risks from whole-body vibration (INDG242) issued by the Health and Safety Executive.

6.1.4 Formal programme of vibration control

If exposure is likely to be at or above the EAV, a formal programme of vibration control measures must be implemented, not only for those likely to be exposed, but for anyone identified by the risk assessment as being at risk (e.g. persons at particular risk, see Section 6.6).

The programme will depend on the work activities, processes, and the possibilities for control. In developing a programme of vibration control consideration should be given to:

- Identifying what is possible to control vibration exposures, how much reduction could be achieved and what is reasonably practicable;
- Determining an appropriate training regime for operators;
- Determining the need for health surveillance;
- Establishing priorities for action and a timetable;
- Assigning responsibilities to individuals to deliver the various parts of the programme;
- Ensuring that the work involved in implementing the vibration control measures is carried out;
- Checking that what you have done has been effective in reducing vibration exposure.

Some controls may take time to put in place, particularly where equipment must be replaced, or new processes developed. Other controls may be considered to be not reasonably practicable but may become so over time as circumstances change. The feasibility of further vibration reductions should be considered periodically during risk assessment review.

6.1.5 Reviewing the risk assessment

The risk assessment must be reviewed where:

- There is any reason to think that it does not reflect the current vibration risk, for example: change in the work or process; purchase of new machinery; decommissioning of older machinery; altered shift patterns.
- New ways of working or improved vibration control techniques that could be applied become known.

- Health surveillance shows that exposures are resulting in health effects, suggesting that vibration risks are not being properly controlled.
- Any issues identified by routine hygiene monitoring indicate the need for additional review.
- Control measures that were not reasonably practicable when originally conducted the risk assessment (e.g. on the grounds of costs) become reasonably practicable (e.g. because of changes in technology and cost).

6.2 Vibration Reduction Measures

When measures have been put in place to control the magnitude of vibration that someone may be exposed to have been lowered to below the EAV, but there are further steps that may still be reasonably taken to further reduce exposure to vibration, then these additional controls must be put in place.

6.2.1 Provision and Use of Auxiliary Equipment

When using vibrating equipment, the use of additional equipment designed to dampen the level of vibration must always be considered where it presents a reasonable alteration to the work being done.

Equipment designed to further reduce vibration can include:

- Anti-vibration handles.
- Balancers or Tensioners.

Additionally, the selection of alternative consumables can provide significant reductions in the level of vibration that can be experienced by operators. These can include:

- Balanced or different material grinding wheels.
- Alternative drill tips.
- Alternative chisel designs.

When selecting alternative consumables, the reduction in vibration magnitude should not be the sole driver for their selection. Departments must ensure that alternative consumables are suitable for use in the device being operated as the selection of incompatible consumables can introduce new risks.

6.2.2 Anti-Vibration Gloves

Several equipment manufacturers produce various types of anti-vibration gloves. These gloves are designed in such a way that the glove will absorb a portion of the vibration using either pads filled with gel, foam or rubber or the use of air pockets.

These gloves are generally in-effective at reducing low frequency vibrations which have the greatest effect on vibration exposure and will have a better reduction on higher frequencies. However, the frequencies that the gloves will be effective at are typically above the frequencies generated by most power tools and will have minimal effect on the frequency-weighted vibration magnitude.

Because of this, departments must not consider anti-vibration gloves as a protective measure, except where the gloves vibration profile is suitable for the equipment in question.

However, the use of gloves should be considered, provided the gloves do not interfere with operators' dexterity, as they will ensure that the hands of the operators are kept warm, ensuring good blood flow, which will assist in reducing the likelihood of vascular symptoms.

6.2.3 Environmental Control

When work is planned that involves the use of equipment the generates a level of vibration, consideration must be given to the environment in which the work will be carried out.

Hand-arm vibration symptoms are exacerbated by a cold and / or wet environment, so work and work equipment must be organised to ensure that it is conducted in an environment that minimises these factors as far as is reasonably practicable.

Where it is not possible to reduce these factors, or the environment cannot be altered, the department must provide equipment that:

- Ensures the operator is kept warm, with gloves provided to protect the hands from the cold. These gloves must be thick enough to provide a reasonable level of warmth, but not thick enough that they present an additional risk from reducing the operator' dexterity.
- Minimises the amount of water or rain that the operator may be exposed to. Water on clothing can cause a wicking effect, transferring a significant amount of heat from the body, meaning even damp clothes can cause a noticeable drop in body temperature.

6.3 Procurement of Vibration Generating Equipment

Before purchasing any new tools or equipment that may be a potential source of vibration, Departments must obtain information from the supplier or manufacturer about the vibration characteristics of the device.

The department purchasing the device should take the following steps to ensure that the device being purchased meets their requirements, whilst also presenting the lowest vibration risk possible:

- Discuss their requirements with suppliers before purchase.
- Check with suppliers that the equipment is suitable for the work.
- Have those who will be using the device test potential equipment and take into account their opinions on ease of use, lightness and other applicable factors.
- Review the devices vibration reduction features, and how these features can be maintained.

Any new equipment purchased must be added to the departments asset register and be subject to a suitable and sufficient risk assessment.

6.4 Information, Instruction, Training and Supervision

6.4.1 Information and instruction

All persons who may be exposed to vibration, whether in excess of the EAV or not, as a result of University work must be provided with sufficient information, instruction, training and supervision to ensure that they are aware of the risks that vibration may present and what measures are in place to protect them from these hazardous effects.

Departments must ensure that the information and instruction provided is recorded and includes (but is not limited to):

- The significant findings of the risk assessment.
- The nature of the risks from exposure to vibration.
- The likely levels of vibration that they may be exposed to.
- What measures are in place to protect them.
- How to use the equipment provided correctly and safely.
- How to wear and use any required additional clothing (environment dependent).
- How to report defects in work equipment.
- What their duties are under the control of vibration regulations.
- What type of health surveillance is available.
- What vibration related symptoms to be aware of, what to do if they are experienced and who to report to.

- How to identify vibration induced injuries and how to report these.

Assistance in determining the appropriate level of training required can be sought from SHaW.

6.4.2 Training

All staff, post graduate students and visitors must be provided with relevant instruction and training on how to use vibrating equipment correctly and the correct use of vibration dampening features, where installed, and any additional items of clothing. This may be delivered in-house or by the manufacturer or supplier of the equipment.

6.4.3 Supervision

Where there is a risk of vibration induced injuries, departments must provide adequate supervision to monitor that risk control measures required to eliminate or reduce the risk are being implemented and remain effective.

6.5 Occupational Hygiene Monitoring

The Occupational Hygienist may be required to provide specialist advice/or undertake monitoring and, where required, to measure levels of exposure to potentially hazardous levels of vibration. They may carry out a pre-monitoring visit to assess the area and processes to determine if monitoring is necessary. The Occupational Hygienist will employ suitable sampling techniques to appropriately assess a person's exposure to vibration using a given piece of equipment and carrying out a specific task.

Upon completion of monitoring, the Occupational Hygienist will provide a written report to the department via SHaW. Departments must ensure that any recommendations from the report are reviewed within the department, and appropriately implemented and considered within the risk assessment. The Occupational Hygienist will make recommendations on alterations to the work task and equipment and the requirement for health surveillance dependent on the outcome of the vibration monitoring.

Further information can be found in the OHS Standard - Occupational Hygiene or assistance can be sought from SHaW.

6.6 Persons at Particular Risk

Certain personnel may be at an increased risk of vibration induced injury. This can be due to a pre-existing medical condition, and these personnel must be carefully considered as part of the risk assessment process.

Personnel who may be at increased risk include the following:

HAVs

- Personnel with an existing HAVs injury, or other diseases of the hands, arms, wrist, shoulders.
- Personnel with disease affecting circulation (e.g. Reynaud's Syndrome) or nerve disorders affecting the hands or arms (e.g. Carpal tunnel Syndrome).

WBV

- Young persons (personnel under the age of 18).
- Personnel who have declared a pregnancy.
- Personnel with existing neck or back problems.
- Personnel who have recently undergone any form of surgery.
- Personnel with internal or external prosthetics (not including dentures).

6.7 Health Surveillance

Health surveillance is a programme of periodic and suitable health checks, performed and interpreted by a competent person, to identify early signs and symptoms of work-related ill health and to allow action to be taken to prevent its progression (and protect others). It is also an important factor in monitoring the effectiveness of vibration control measures (although it is not a substitute for controlling risk at source). Suitable health surveillance typically includes regular health checks and is provided by the University's Occupational Health Service.

Departments are required to implement a program of Health Surveillance where:

- Personnel who experience levels of vibration in excess of the EAV.
- Personnel identified by the risk assessment who may be at increased risk (See Section 6.6).

Health surveillance is not necessary for those whose daily exposures reach or exceed the EAV only on rare occasions, and where the risk assessment identifies that the risk of vibration injury is considered low.

The arrangement of a health surveillance program can be made by contacting the University's Occupational Health Service. The details of the monitoring program will depend on the work being carried out, and the levels of vibration to which personnel may be exposed.

When a program has been agreed with the Occupational Health Service, personnel are required to comply with the recommended health surveillance.

The Occupational Health Service will discuss the results of monitoring with individual personnel on completion, and a full, anonymised report will be provided to the relevant department to assist them in ensuring that their controls remain effective, and that they are aware of emerging areas of concern.

It is the responsibility of the Department to keep records of the outcome of the health surveillance and information on the persons fitness to continue to work with vibrating equipment or activities. The record should not contain any confidential medical information, this should be kept by Occupational Health Service only.

7. DOCUMENTATION AND RECORDS

7.1 The requirements to meet the standard for vibration are described in this document. Some aspects are covered in more detail in other documents which are referenced throughout.

7.2 Written records must be maintained to comply with this Standard.

8. COMMUNICATION AND REPORTING

8.1 A copy of the latest Standard will be available on the SHaW website.

8.2 Departments are expected to report on compliance with this Standard as part of regular OHS performance monitoring, further information can be obtained from SHaW.

8.3 With regard to this Standard, incidents associated involving new and expectant mothers must be reported through SIRIS. If more than one person is involved in an incident, then a separate report should be completed for each individual involved.

8.4 Some incidents may be reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR). These regulations require that certain work-related injuries, cases of ill health and dangerous occurrences are reported to the HSE. SHaW manage the reporting of incidents under RIDDOR.

9. COMPLIANCE

This Standard aims to meet the requirements of:

- Health and Safety at Work Act (1974)
- Management of Health and Safety at Work Regulations (1999)
- Managing for Health and Safety HSG65 (2013)
- The Control of Vibration at Work Regulations (2005)
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (2013)

10. DOCUMENT HISTORY

Recorded changes to this document are maintained in the SHaW Document Control Register