

OBJECTIVE

RMIT is committed to the prevention of injuries and to provide a safe work and learning environment for staff, students and visitors.

The handling of materials either physically or mechanically often introduces risks to health and safety which can be managed to avoid injury. Inappropriate transport, handling or storage of materials can increase the risk of injuries and illnesses. Inadequate systems may result in overloading of storage facilities, excessive reaching or lifting, restricted aisles and passageways.

This process outlines how to identify, assess and control hazardous manual tasks.

BACKGROUND

SCOPE

This process applies to all RMIT Staff, Students and Third Parties globally.

WHAT MUST GO RIGHT?

Should this Process be implemented appropriately by RMIT, the expected outcomes – known as ‘what must go right’ – will be that:

- All leaders, staff, students and third parties are aware of the long-term consequences of manual handling risks and are appropriately informed so that they can actively participate in reducing the risks.
- Any tasks that may present a manual handling risk are identified by the person assigned to carry out the task and/or by their Operational Leader, and appropriately assessed and controlled.
- All staff, students and third parties who conduct hazardous manual tasks have been trained in manual handling and safe lifting techniques and have been consulted about the controls in place for the particular tasks.

PROCEDURE

1. Implementation

Hazard Identification

Operational leaders must consult with staff, students and third parties in order to identify all hazardous manual handling tasks within the work and learning environment. In all instances the Operational Leader must record the identified manual handling hazards using **HR - HSW-PR34-FR01 - Hazardous Manual Handling Task Identification Worksheet**.

Hazardous manual handling tasks are to be identified when:

- Planning, designing, renovating, constructing work areas and facilities
- A new task is introduced into a staff members job
- Observation of manual handling tasks
- New plant or equipment is introduced
- Workstations or the work and learning environment is changed
- New or additional information relating to hazardous manual handling becomes available
- Consulting with staff, students and/or third parties performing manual handling tasks
- An incident, injury or near miss is reported in the work and learning environment

Hazard identification may be carried out for a group of tasks rather than for individual tasks if all the tasks in the group are similar and does not result in the person being subject to any greater, additional or different risk.

Where practicable, manual handling risks will be identified and controlled during the planning, design or at purchase.

When identifying manual handling hazards the following must be considered:

<u>Posture / Actions</u>	Postures used, and actions performed can place increased pressures on the spine. Bending forward, bending sideways or twisting, one handed carrying, uneven lifting, loads above shoulder, awkward shapes, jerky movements all increase the risk of injury.
<u>Weight / Force</u>	Weight and force can place a high stress on an individual. If a load is difficult to pull, push, slide or lift then it is a hazard
<u>Duration / Frequency</u>	The duration and frequency of a task can have a significant impact on the risk of Musculoskeletal Disorders (MSDs) even for lightweight materials handling
<u>Work Environment</u>	Risk factors - Slippery floors, wet floors, uneven floors, rough ground, cluttered untidy workspaces, stressful conditions i.e., extreme heat or cold
<u>Weight</u>	Weight of objects being manually handled should be considered. There is no maximum weight rule applied for manual handling; however, the risk of MSD rises significantly as the weight increases
<u>Hand-arm Vibration</u>	Exposure to hand–arm vibration can result in MSD. The use of any vibrating hand tools and other vibrating equipment should be considered when identifying manual handling hazards
<u>Whole Body Vibration</u>	Exposure to whole body vibration can result in MSD. Vibration during the operation of mobile equipment as well as in other sitting and standing operations should be considered
<u>Clothing</u>	It is important the correct clothes and footwear are worn for the job. Clothing risks include: Tight clothing; Shoes with slippery soles, or rigid soles; poorly fitted gloves or gloves not suited to the activity
<u>Skills, Experience and Age</u>	Inexperienced, untrained and unskilled members of staff will be at greater risk of injury. In general, younger staff members are at greater risk because they are still developing physically

Risk Assessment

The Operational Leader is to conduct a risk assessment for each hazardous manual handling task identified in the work and learning environment. All risk assessments must be conducted in consultation with the relevant staff, student, third party and/or member of the HSW team. The risk assessment is to be documented using **HR - HSW-PR09-TM04 - Hazardous Manual Handling Risk Assessment Template**.

Risk assessment of hazardous manual tasks is to include examination of the following risk factors:

- The postures, movements and forces required to carry out the task
- The duration and frequency of the task
- Environmental factors that act directly on a person carrying out the task including heat, cold, vibration, humidity and wind
- Systems of work or the way the work is organised and will determine of the sources of risk.

The following method (TILE) may be used for simple hazard identification and assessment of manual handling tasks. This assessment method is not intended to replace the formal risk assessment, rather it provides a simple tool for manual handling task decision making and may be useful in supporting the formal hazard identification and risk assessment processes.

The TILE method is used to assess manual handling tasks taking into consideration the Task, the Individual, the Load and the Environment as follows:

Task	Individual capability	Load	Environment
<ul style="list-style-type: none"> Does the task have to be done manually? Can it be done another way? Is there a safe system of work? Are there high-risk movements involved? Does the task involve carrying or moving over a distance? 	<ul style="list-style-type: none"> Strength, height and fitness appropriate to the task? Trained for the task? 	<ul style="list-style-type: none"> Can the load be moved without straining? Consider the shape of the load? Are there sharp edges? Is it slippery, hot or cold? Is assistance required IS PPE required? (e.g. gloves for grip) 	<ul style="list-style-type: none"> Can the workplace layout be reorganised to reduce risk? Is there enough space to carry out the task? Is the floor uneven, slippery or unstable? Is the necessary equipment available and in good order? Is the furniture adjustable or easily moved if required? Is there adequate lighting to complete the task safely?

Risk Control

If the risk assessment identifies there is a potential for injury, the Operational Leader in consultation with staff, students and/or third parties must eliminate or control these hazards.

When determining risk controls to reduce manual handling risks, the Operational Leader must follow the hierarchy of control outlined in **HR - HSW-PR09 - Risk Management**. Controls (if elimination is not possible) are most effective when combined, for example, providing a trolley for a particular task, combined with providing training for the persons carrying out the task.

The hierarchy of controls outlines the steps that must be taken to eliminate or control hazards:

Examples of effective manual handling controls (from most to least effective) could include:

Hierarchy of Control		Examples of control measures
Level 1	Elimination	<ul style="list-style-type: none"> Automate the manual task (such as using remote controls) Deliver goods directly to the point of use to eliminate multiple handling
Level 2	Substitution	<ul style="list-style-type: none"> Replace heavy items with those that are lighter, smaller and/or easier to handle Replace hand tools with power tools to reduce the level of force required to do the task
	Isolation	<ul style="list-style-type: none"> Isolate vibrating machinery from the user, for example by providing fully independent seating on mobile plant
	Engineering	<ul style="list-style-type: none"> Use mechanical lifting aids Provide workstations that are height adjustable
Level 3	Administrative	<ul style="list-style-type: none"> Rotate workers between different tasks Train employees in safe lifting techniques.
	Personal protective equipment	<ul style="list-style-type: none"> Heat resistant gloves for handling hot items Non-slip footwear to prevent slips

If no single measure can control the risk, use a combination of controls.

Control considerations

When implementing controls, the following should be considered:

- Before purchasing equipment such as tools, containers, workstations, machinery and vehicles, always check whether the item has been designed so that it can be used safely and best matches the needs of the staff, students or third parties who will be using it.
- Workstation should be designed to allow people to work in an upright position, shoulders relaxed in a natural position and upper arms close to the trunk most of the time without large reaches to perform the task. Adjustable workstations are the best option.
- Appropriate working heights should be considered in relation to the task performed, e.g. tasks with high visual demands should be performed above elbow height, and possibly with a tilted work surface, whereas light manipulative tasks or tasks involving the use of a keyboard should be performed just below elbow height.
- Change the nature, size, weight or number of items handled to reduce the risk of MSDs
- Ensure hand tools are designed ergonomically and well maintained
- Use mechanical aids where possible such as conveyors, cranes, hoists, loading dock levellers, turntables, springs or gas struts, forklifts, lift tables, trolleys etc.
- Reduce force required for push/pull actions by using motorised equipment, positioning trolleys with wheels in direction of travel, treating floor surfaces to reduce resistance, etc.
- Improve task design, change the workload and pace of work to reduce risk.

Safe Work Procedures

After the risk assessment is complete and the controls agreed upon with staff, develop a work instruction using **HR - HSW-PR01-TM04 - Work Instruction Template** and arrange appropriate training.

Safe work procedures are to be developed by the Operational Leader and relevant designated work group in consultation with a Senior Advisor, Health and Safety.

If it is not reasonably practical to eliminate a risk arising from manual handling the risk must be controlled by:

- Modifying the design – redesign the work activity, changing the objects to be handled or the work environment
- Providing mechanical aids – provide equipment or make arrangements for team lifting (team lifting should be the last alternative)
- Training – ensure those perform the activity are appropriately trained in safe lifting techniques, correct use of equipment and team lifting

Information, Instruction and Training

Operational Leaders are responsible for ensuring that manual handling information, instruction and training is conducted with staff who:

- Carry out manual handling tasks
- Supervise or direct work involving manual handling
- Select and purchase tools and equipment to be used in manual handling tasks
- Design manual handling tasks or systems of work, or the layout of a work and learning environment where manual handling is carried out
- Are involved in identifying hazardous manual handling and the assessment and control of musculoskeletal risks

For staff, students or third parties exposed to hazardous manual handling tasks, the Operational Leader is to make sure appropriate training is provided for safe manual handling and lifting techniques. This training is to include:

- The process for identifying and assessing and controlling risk associated with hazardous manual handling
- The measures in place to control the risk of musculoskeletal disorders (MSD)
- The different factors that contribute to manual handling hazards
- Controlling manual handling hazards
- Safe lifting techniques
- Incident reporting

Records of this training are to be recorded and maintained by the Operational Leader in line with **HR - HSW-PR04 - Records Management**.

Reviewing of Risk Control Measures

The Operational Leader is responsible for reviewing the effectiveness of risk controls in consultation with staff, students, third parties and/or the HSW Team. This review is to be documented in **HR – HSW-PRO9-TM04 - Hazardous Manual Handling Risk Assessment Template**.

Control measures in place must be reviewed and, if necessary, revised:

- Prior to any alteration to any objects used or to systems of work
- Prior to an object being used for another purpose other than for which it was designed
- If new or additional information becomes available
- If an MSD is reported
- In relation to any incident notifiable to the Regulator
- Where for any reason the measures do not adequately control risk
- Following a request from a Health and Safety Representative

Other methods and forums for periodic review and consultation include but are not limited to:

- Direct discussions with relevant staff / groups
- Staff meetings
- Health and Safety Committee (HSC) meetings
- Reviewing risk assessments and / or safe work procedures
- Investigating manual handling incidents

2. Responsibilities

Senior Leaders

- Ensure there are resources available to implement this process in their area of control
- Review performance indicators on a regular basis

Operational Leaders

- Implement this process in their area of control
- Consult with HSW team, staff, students and third parties in relation to identifying hazardous manual handling tasks and assessing and controlling associated risks
- Ensure all hazardous manual tasks are identified and appropriately risk assessed
- Ensure risks associated with identified hazardous manual tasks are controlled
- Maintain records related to hazardous manual handling identification, risk assessment and risk control, including training records

- Ensure staff, students and third parties are appropriately trained in this process and the processes related to the hazardous manual tasks under their control
- Ensure manual handling requirements are communicated to all staff, third parties and students
- Monitor and review implemented risk controls
- Monitor compliance with this process and report on outcome
- Identify and risk manage all hazardous manual tasks, including lifting/pushing/pulling and repetitive tasks (e.g. computer use, pipetting etc.)
- Ensure risks are controlled through mechanical aids, task modification and/or ergonomic furniture
- Ensure staff/students/third parties who undertake hazardous manual tasks complete relevant training

Staff, students and third parties

- Undertake relevant manual handling training
- Report tasks that may involve hazardous manual handling
- Assist in assessing and controlling the risks of hazardous manual tasks
- Follow this process and all reasonable instructions relating to HSW and manual handling
- Comply with measures implemented to control risk associated with hazardous manual tasks.

Visitors

- Comply with the requirements of induction
- Undertake training where required
- Comply with all safety rules and instruction

HSW Team

- Facilitate hazardous manual task risk assessments where required
- Regularly review this process in consultation with relevant staff members
- Develop and report on KPIs relevant to this process
- Monitor compliance with this process and report on outcomes

3. Definitions

Defines any key terms and acronyms relating to the process where they apply.

Term / acronym	Definition
DWG	Designated Work Group: A group of employees of the employer at one or more workplaces. The particulars of the DWG are determined by negotiation between the employer and the employees and should consider the number of employees, the location and the types of activities conducted in the workplace. A DWG is formed for the purpose of electing a HSR.
Hazardous Manual Handling	Any manual handling activity that has any of the following characteristics: <ul style="list-style-type: none">• Repetitive or sustained force• High or sudden force• Repetitive movement• Sustained or awkward posture• Exposure to vibration• Handling live people or animals• Loads that are unstable, unbalanced or hard to hold
HSC	Health and Safety Committee

HSR	Health and Safety Representative: An employee who is a member of the DWG and elected by its members to represent them in relation to health and safety matters, risks, or concerns.
HSW	Health, Safety and Wellbeing
Manual Handling	Any activity that requires the use of force exerted by a person to lift, push, pull, carry or otherwise move, hold or restrain any object, person or animal
Musculoskeletal Disorder (MSD)	An injury, illness or disease of the musculoskeletal system affecting the muscles, bones, tendons, ligaments, intervertebral discs or nerves that arises in whole or in part from manual handling in the workplace, whether occurring suddenly or over a prolonged period of time but does not include an injury, illness or disease that is caused by crushing, entrapment or cut resulting primarily from the mechanical operation of plant.
Operational Leaders	Line Managers, supervisors
Reasonably practicable	Regard must be had to the following matters in determining what is (or was at a particular time) reasonably practicable in relation to ensuring health and safety: <ul style="list-style-type: none">• The likelihood of the hazard or risk concerned eventuating;• The degree of harm that would result if the hazard or risk eventuated;• What the person concerned knows, or ought reasonably to know, about the hazard or risk and any ways of eliminating or reducing the hazard or risk;• The availability and suitability of ways to eliminate or reduce the hazard or risk; and• The cost of eliminating or reducing the hazard or risk.
Senior Leaders	Heads of School, Deans, Senior Managers

4. Supporting Documents

Lists the supporting and related Processes and Guidance Material, Legislative references, Australian and International Standards etc. that may be useful references for process users

- HR - HSW-PR09 - HSW Risk Management
- HR - HSW-PR04 - HSW Records Management
- HR - HSW-PR34-FR01 - Hazardous Manual Handling Task Identification Worksheet
- HR – HSW-PR09-TM04 – Manual Handling Risk Assessment Template
- HR - HSW-PR01-TM04 - Work Instruction Template