



Version	Approved by	Approval date	Effective date	Next full review
3.0	Director of Risk and Safety	30 November 2020	30 November 2020	November 2023
Procedure Statement				
Purpose	To outline the process for identifying, assessing and controlling hazardous manual tasks at UNSW.			
Scope	This procedure applies to all workers in UNSW Faculties and Divisions in NSW and the ACT			
Are Local Documents on this subject permitted?	<input checked="" type="checkbox"/> Yes, however Local Documents must be consistent with this University-wide Document		<input type="checkbox"/> No	
Procedure Processes and Actions				

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Introduction

This procedure describes the risk management process involved in the identification of hazardous manual tasks, assessing the risks, implementing controls and reviewing control measures. Throughout each step of the process, workers who are involved in the manual tasks are to be consulted. (See [Appendix 1](#)).

1. Identify Hazardous Manual Tasks

Identify hazardous manual tasks - those tasks that have the potential to cause a musculoskeletal disorder (MSD). A manual task is hazardous if it involves any of the following:

- repetitive or sustained force
- high or sudden force
- repetitive movement
- sustained or awkward posture
- exposure to vibration.

Hazards that arise from manual tasks generally involve interaction between a worker and:

- the work tasks and how they are performed
- the tools, equipment and objects handled
- the physical work environment.

Hazardous manual tasks can be identified by:

- Reviewing the duties in position descriptions to identify potential manual task risks
- Consulting with workers/students who are involved in manual tasks to find out what hazards are involved. For example, workers could be asked to identify tasks that:
 - are difficult to do (appearing harder than they should be)

- cause muscle fatigue
- involve awkward positions or movements or difficulty controlling loads
- cause discomfort
- Analysing Work Health and Safety and Workers Compensation statistics
- Observing how workplace equipment is set up, and the associated workflows between different areas
- Observing workers performing manual tasks
- Conducting Workplace Inspections
- Investigating manual task incidents to identify what caused the injury.

2. Assessing the risk of Hazardous Manual Tasks

Where the risk is well known and it is known how to control it, controls should be documented in related Safe Work Procedures (SWPs). Where risk controls are unknown or uncertain, a risk assessment should be conducted for any manual tasks that have been identified as hazardous using [HS902 Manual Task Risk Management Form](#).

The risk assessment can assist in determining:

- which postures, movements and forces of the task pose a risk
- where during the task they pose a risk
- why they are occurring; and
- what needs to be fixed.

When conducting a risk assessment of manual tasks, the following factors must be taken into consideration:

- the posture and movement of the worker
- the forces exerted by the worker and any forces exerted on the worker by the person, animal or thing
- speed of movement(s) by the worker
- exposure of the worker to vibration; and
- the duration and frequency of the task.

You must also take into consideration the possible sources of the risks including:

- the layout or design of the work area. For example, is the area set up to prevent awkward postures?
- the work environment. Sources of risk in a work environment may include temperature, humidity, floor surfaces, lighting and obstructions
- the nature, size, weight or number of persons, animals or things handled, including any tools used
- work organisation and the system of work. For example, the pace of the work, duration of work and time constraints; and
- the physical characteristics of a worker, for example pre-existing health conditions.

3. Controlling the risks

You must aim to eliminate any hazardous manual tasks and associated risks. If it is not reasonably practicable to eliminate the risk, controls must be put in place to minimise the risk.

Control measures should be aimed at eliminating or minimising the frequency, magnitude and duration of movements, forces and postures by changing the source of risk: the work area, tools, load, environment, method of handling and/or the way work is organised. See Figure 1 for examples of controls using the Hierarchy of Controls.

Figure 1

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
Level 2	Substitution	<ul style="list-style-type: none"> Replace heavy items with lighter, smaller and/or easier to handle items Order smaller quantities or request items are packaged in smaller boxes to reduce weight of items and force required 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 Automate mail/book sorters, conveyor belts, tugs
	Engineering	<ul style="list-style-type: none"> Use mechanical lifting aids e.g. pallet jack; scissor lift trolley Use height adjustable workstations (relies on the individual to adjust as required)
Level 3	Administrative	<ul style="list-style-type: none"> Rotate workers between different tasks to reduce duration of manual tasks Consider engaging additional staff as required to carry out tasks Train workers to use control measures when carrying out tasks
	Personal protective equipment	Use of the following: <ul style="list-style-type: none"> Heat resistant gloves for handling hot items Shock absorbent shoes for work on hard concrete floors Safety glasses to reduce risk of eye injuries

NOTE: Certain positions may require more awareness/training in relation to hazardous manual tasks that are required to be conducted on a day to day basis, for example, a storeman who may be continually lifting or moving items; a workshop user who may be required to lift, move and handle large pieces of material or a laboratory worker who is exposed to repetitive pipetting. Such training should include information on:

- manual task risk management, including the characteristics of the hazardous manual task/s
- specific manual task risks and the measures in place to control them
- how to perform manual tasks safely, including the use of mechanical aids, tools, equipment and SWPs.

4. Review controls

Control measures that have been implemented must be reviewed and, if necessary, revised periodically to make sure they are effective and to maintain a work environment that is without risks to health and safety.

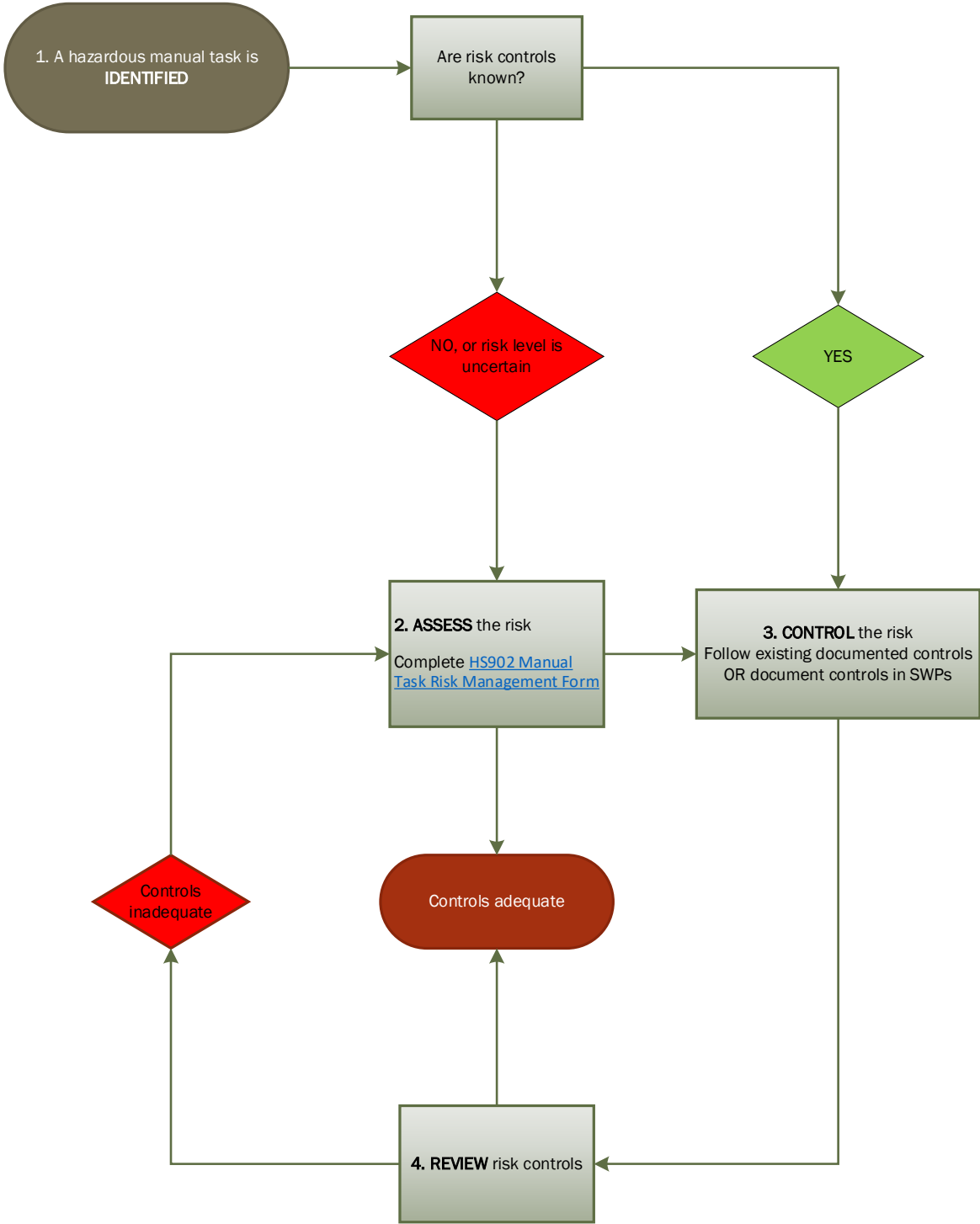
Control measures may be reviewed using the same consultative methods as the initial hazard identification step. Consult your workers involved in the manual task and their health and safety representatives (if applicable) and consider the following:

- Are the control measures working effectively in both their design and operation, without creating new risks?
- Are workers actively involved in the risk management process? Are they openly raising health and safety concerns and reporting problems promptly?
- Has new work methods or new equipment reduced physical strain or difficulty?
- Has instruction and training on hazardous manual tasks and the implemented control measures been successful?
- Is the frequency and severity of MSDs reducing over time?
- Is an alteration planned to any structure, plant or process that is likely to result in a worker being exposed to a hazardous manual task?
- Has an incident occurred as a result of a worker being exposed to a hazardous manual task?
- If new information becomes available, does it indicate current controls may no longer be the most effective?

If problems are found, go back through the risk management steps (Sections 2 - 4), review your information and make further decisions about risk controls.

Appendix 1: HAZARDOUS MANUAL TASK RISK MANAGEMENT PROCESS

IN CONSULTATION WITH WORKERS



Accountabilities	
Responsible Officer	Director of Risk and Safety
Contact Officer	Senior Manager, Health & Safety
Supporting Information	
Legislative Compliance	This Procedure supports the University's compliance with the following legislation: Work Health and Safety Regulation 2017 Work Health and Safety Act 2011 (NSW)
Parent Document (Policy)	Health and Safety Policy
Supporting Documents	Hazardous Manual Tasks Workstations
Related Documents	Hazardous Manual Tasks Code of Practice ISO45001:2018 Occupational Health and Safety Management Systems HS902 Manual Task Risk Management Form HS114 Workstation Checklist
Superseded Documents	HS432 Hazardous Manual Tasks Procedure, v2.2
File Number	2020/010916
Definitions and Acronyms	
Hazardous Manual task	<p>A hazardous manual task is a task requiring a person to lift, lower, push, pull, carry or otherwise move, hold or restrain any person, animal or thing involving one or more of the following:</p> <ul style="list-style-type: none"> • repetitive or sustained force • high or sudden force • repetitive movement • sustained or awkward posture, or • exposure to vibration. <p>These hazards directly stress the body and can lead to an injury.</p>

<p>Musculoskeletal disorder (MSD)</p>	<p>The term 'MSD' refers to an injury to, or a disease of, the musculoskeletal system, whether occurring suddenly or over time. It does not include an injury caused by crushing, entrapment or cutting resulting from the mechanical operation of plant.</p> <p>An MSD may include:</p> <ul style="list-style-type: none"> • sprains and strains of muscles, ligaments and tendons • back injuries, including damage to the muscles, tendons, ligaments, spinal discs, nerves, joints and bones • joint and bone injuries or degeneration, including injuries to the shoulder, elbow, wrist, hip, knee, ankle, hands and feet • nerve injuries or compression, for example carpal tunnel syndrome • muscular and vascular disorders as a result of hand-arm vibration • soft tissue injuries including hernias, and • chronic pain. <p>An MSD can occur in two ways:</p> <ul style="list-style-type: none"> • gradual wear and tear to joints, ligaments, muscles and inter-vertebral discs caused by repeated or continuous use of the same body parts, including static body positions, or • sudden damage caused by strenuous activity, or unexpected movements such as when loads being handled move or change position suddenly. <p>Injuries can also occur due to a combination of the above mechanisms.</p>
<p>Safe Work Procedure (SWP)</p>	<p>A procedure which describes how work is to be carried out in a safe and standardised process. It identifies the risks associated with a specific work task and incorporates the appropriate risk control measures into a detailed sequence of steps for doing the task safely. The SWP includes a description of the equipment used in the work, the standards or codes to be complied with and the qualifications and training required to do the activity.</p>

Revision History

Version	Approved by	Approval date	Effective date	Sections modified
1.0	Director, Human Resources	1 January 2007	1 January 2007	New Document
1.3	Adam Janssen	13 October 2010	13 October 2010	Links Updated
2.0	Director, Human Resources	2 April 2013	2 April 2013	Document changed from guideline to procedure in accordance to new WHS act and Regulation 2011
2.1	Director, UNSW Safety and Sustainability	30 April 2014	30 April 2014	Reviewed for administrative updates
2.2	Director, UNSW Safety and Sustainability	29 February 2016	29 February 2016	Reviewed for administrative updates
3.0	Director of Risk and Safety	30 November 2020	30 November 2020	Full review with administrative updates Updated Appendix