



Manual Handling Procedure

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Authority

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1 Purpose

This procedure describes the process and provides practical advice in the required identification, assessment and control of risks associated with manual handling tasks and activities across all SCEE operational sites and office locations.

2 Scope

This procedure applies to all SCEE employees, contractors, subcontractors, visitors or members of the public working on or visiting sites under the control of SCEE.

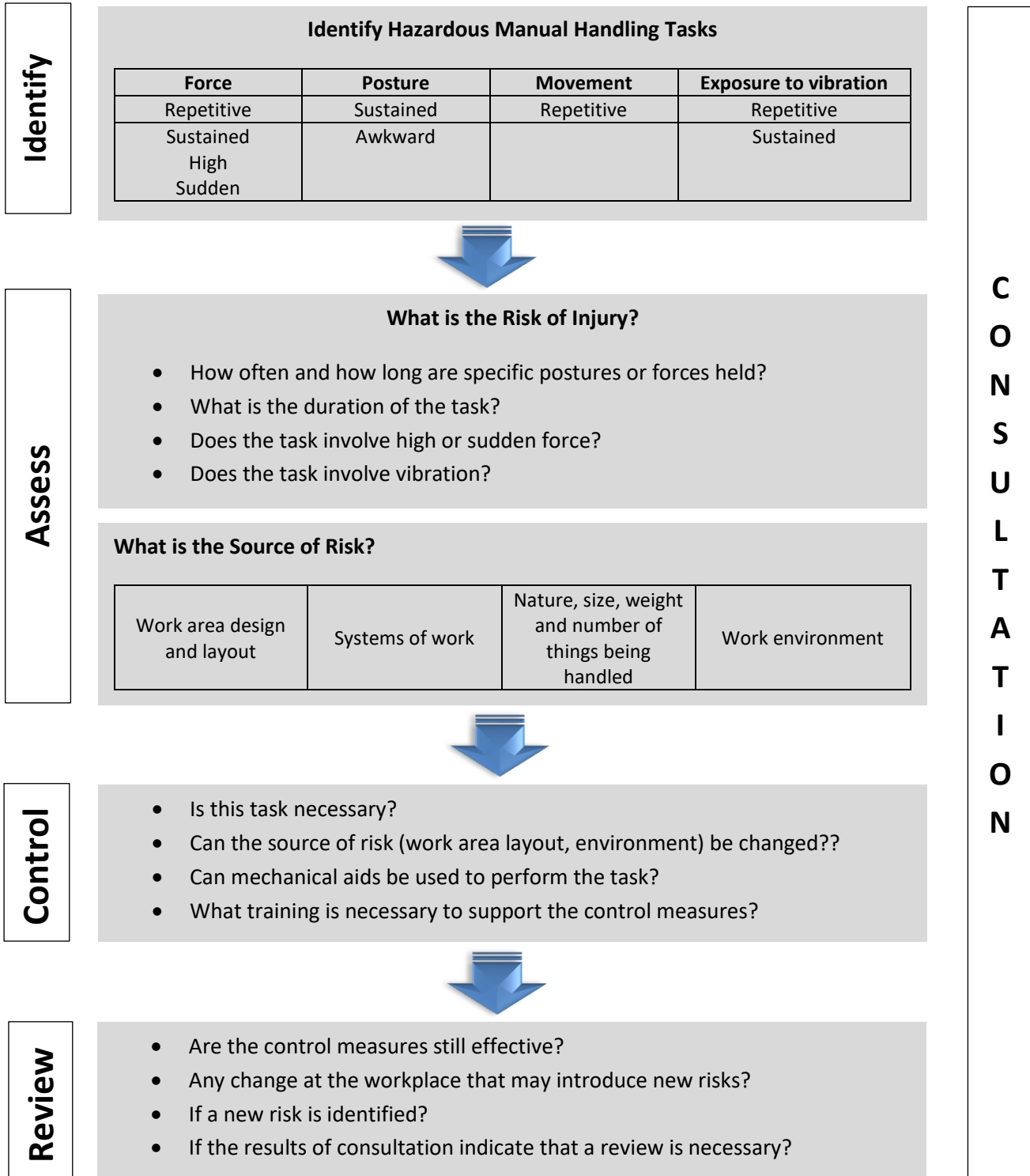
3 Definitions

Term	Explanation
JHA	Job Hazard Analysis
MSD	Musculoskeletal disorder
OOS	Occupational Overuse Syndrome
RSI	Repetitive Strain Injury
Shall	A mandatory requirement
Should	An advisory requirement
Sprain	An injury involving the stretching or tearing of a ligament
Strain	An injury involving the stretching or tearing of a musculotendinous (muscle and tendon) structure.
Worker(s)	Any person carrying out work in any capacity for SCEE including employees and subcontractors.

4 Responsibilities

Role	Responsibility
Supervisors	Ensure manual handling risks are considered in the development of JHA's for all tasks involving manual handling. Ensure personnel under their control are aware of the requirements of manual handling tasks through prestart and toolbox meetings. Provide appropriate supervision and monitoring of manual handling tasks to ensure application of control measures.
Workers	Participate in the JHA and risk assessment process for all tasks. Consider manual handling risks for all tasks. Attend all prestart meetings. Execute tasks in accordance with JHA and Procedural requirements. Report any injury immediately.
HSE Advisor	Audit and monitor compliance with this procedure.

5 Flowchart



6 Procedure

Manual handling is any activity which requires physical effort to achieve a result. Many tasks involving manual handling are performed frequently or on a daily basis without any adverse effects, while some manual handling tasks can be hazardous to the musculoskeletal system.

6.1 Hazardous Manual Handling

Hazardous manual handling is any activity that requires a person to perform work which may have an adverse impact on the musculoskeletal system, with consideration to the following:

- Using force/effect in lifting, lowering, pushing, pulling, holding, or carrying.
- Performing work that is repetitive
- Prolonged awkward positions (bending, twisting, or reaching)
- Sustained postures for long periods of time
- Equipment that causes vibration (tools, certain plant)
- Holding loads that maybe difficult to grab or hold or are unstable

6.1.1 Risk Factors

Injury to the musculoskeletal system can be:

- gradual and caused by frequent or prolonged periods performing manual tasks
- sudden injuries caused by strenuous activity or unexpected movement of a load or position
- direct trauma from unexpected events such as a fall while carrying a load.

Factors affecting potential injury from manual handling include:

- Direct factors - action and postures, force, loads and exposure to vibration
- Indirect factors - environmental conditions, lighting, temperature, work practices and systems of work including rest breaks and familiarity with the task and worker characteristics

Actions and Movements should not cause undue discomfort or pain. Actions should be performed smoothly and with control, avoiding sudden or jerky movements. Extreme ranges of joint movement should be avoided, especially when this is prolonged or repetitive. Repetitive bending, twisting and overreaching movements are among those liable to increase the risk of manual handling injuries.

All injuries are to be reported as soon as possible and investigations into manual handling injuries should be thorough to identify the root cause of the injury and review all relevant tasks the injured party has performed.

Refer: [SCEE-BS-HS-PRO-0004 Event Management & Investigation Procedure](#)
 [SCEE-BS-HS-WIN-0006 Event Reporting Work Instruction](#)
 [SCEE-BS-HS-WIN-0007 Event Investigation Work Instruction](#)

6.1.1.1 **Musculoskeletal Disorder**

Musculoskeletal Disorder (MSD) is any injury or disease of the musculoskeletal system whether occurring suddenly or over time. MSD includes injuries and conditions such as:

- Sprains and strains
- Joint injuries
- Disc protrusions
- Muscular and vascular disorders (result of hand-arm vibration)
- Soft tissues injuries. (such as hernias)
- Nerve injuries or compression. (carpel tunnel)

6.1.1.2 **Repetitive Strain Injury (RSI)**

Repetitive Strain Injury (RSI) is also referred to as Occupational Overuse Syndrome (OOS) which includes the following:

- Carpal tunnel syndrome- painful disorder of the hand caused by pressure on nerves that run through the wrist.
- Epicondylitis (tennis elbow) - painful condition involving the tendons that attach to the elbow and inflammation of forearm muscle
- Tenosynovitis (trigger finger) - swelling and difficulty moving a particular joint where the inflammation occurs
- Tendonitis - inflammation of a tendon.
- Cumulative trauma disorder (CTD) - a large group of conditions that result from traumatizing the body in over a period of time.

RSI / OOS can be caused by repetitive movements, poorly designed or set up workstations/ benches, badly designed tools that require excessive force or are inappropriate for the job, awkward postures and movements and sustained postures.

6.2 **Hazard and Risk Assessment**

6.2.1 **General Requirements**

Prior to the execution of any tasks or activities involving manual handling, a JHA must be conducted as per [SCEE-BS-HS-PRO-0001 Job Hazard Analysis](#). Manual handling risks shall be considered in the preparation of JHA's for all tasks. SCEE's Manual Handling Risk Assessment checklist can be utilised to assist in identifying these risks.

Risk assessment must occur:

- As early as possible in planning of a new or modified manual handling task and in the review of existing tasks.
- When determining the approach and methods to be used in the manual handling tasks.
- When decisions are being taken on control measures to reduce risk factors
- Where the effectiveness of implemented control measures are being reviewed.

The purpose of risk assessment is to:

- a) Identify potential hazards
- b) Identify and implement adequate controls

Refer: [SCEE-BS-HS-PRO-0001 Job Hazard Analysis Procedure](#)
[SCEE-BS-HS-LIS-0013 Manual Handling – Risk Assessment Checklist](#)

6.2.2 Consultation

Consultation with personnel executing manual handling tasks is important as they are likely to be more aware of the risk of manual handling injuries associated with their jobs.

Employees may be able to indicate task or movements which are particularly fatiguing, strenuous or difficult to perform. The direct observation of work areas and of the task being performed will assist in identifying risk. Workplace inspections, audits, walk-through surveys and the use of checklist can assist in the risk identification process.

6.2.3 Considerations

The JHA should, as a minimum, consider the following:

- Work environment and workplace/ workstation layout
- Location of loads and distances that they have to be moved
- Weights and forces involved
- Characteristics of the load and any equipment used
- Postures, positions, actions and movements that have to be taken by each person involved in the manual handling task
- Duration and frequency of manual handling task
- Skill, experience and personal characteristics of each person who has to carry out manual handling task
- Clothing (uniform or PPE) that is worn during manual handling; and
- Any other relevant factor that has been identified by any person.

6.2.4 Controls

After identified risks have been assessed, they should be removed or reduced by applying the Hierarchy of Controls to eliminate or reduce the risk of potential injury.

Where a manual handling task is assessed as being a risk, the Supervisor must take all practicable steps to control the risk.

The Supervisor in charge should:

- a) Redesign the task
- b) Where redesign is impracticable provide mechanical aids as appropriate, PPE and team lifting solutions
- c) Ensure that personnel involved receive appropriate training and supervision

It is likely that for many tasks the application of these types of control will not be mutually exclusive. In some tasks it may be workable to redesign some parts and to provide mechanical aids.

Some general principles for reducing risks associated with manual handling are:

- minimise the lifting and lowering forces exerted.
- avoid the need for bending, twisting, and reaching movements; and
- reduce pushing, pulling, carrying and holding.

6.3 Preventing injury

In addition to identified control measures, there are general measures that workers can take to minimise the risk of injury such as warm up and stretching exercises and applying good manual handling practices.

6.3.1 Lifting

There are some simple basic rules to follow before lifting – referred to as SMART.

Size up the load- how big is it? How much does it weigh? Is assistance required?

Move close to the load

Always bend at the knees

Raise the object with your legs – The leg muscles are the strongest muscles

Turn by moving your feet- Never twist at the hips when lifting or carrying a load

If it can be moved another way, do not lift it!

6.3.2 Pushing verses pulling

Push rather than pull. Pushing a load is generally less stressful on your body because you use the weight of your body and maintain a more neutral posture (The spine is not rotated, or twisted, to the left or right, or bent to the left or right). When you pull, your body is often twisted and you frequently use only one hand. Pushing will also normally provide better vision.

6.3.3 Individual factors

Individual factors that can increase the likelihood of injury include:

- Skills and experience. Being inexperienced in a job is a significant risk factor particularly in tasks involving high force.
- Physical characteristics. An overload situation may result from a mismatch between the workers and the task.
- Older workers may have a decreased physical capacity, and this should be considered in physically demanding or fast work.
- Workers with a recent injury have a greater chance of being re-injured.
- Workers who are new, have transferred from another job or are returning from extended absences and whose muscles are not conditioned to the work.
- Job stress can cause increased tension in muscles and an increased potential for injury.
- Lacking or unsuitable PPE and clothing can increase the potential for injury. For instance, incorrectly sized gloves interfere with a worker's gripping ability and manual dexterity and contribute to increased muscular effort and fatigue.
- Workspace, including work station layout will need to suit the widest range of physical characteristics of workers, such as reaching distances to suit shorter workers and knee and leg clearances to suit larger workers

6.4 Training & Awareness

Manual Handling should be discussed during prestart and toolbox meetings to ensure personnel are aware of the following:

- How to perform manual tasks safely and the principles of manual handling
- The potential impact of manual handling on the body and recognition of early signs of injury.
- Specific manual task risks identified and the measures in place to control them
- The use of mechanical aids, tools, equipment and procedures
- Reporting manual handling concerns
- How to consider and address manual handling as part of JHA process
- Office ergonomics

The information shall be reviewed on a regular basis including when there is a change to work practices or process, with implementation of new equipment or changes to legislation.

7 References

Documents both internal and external that are referenced within the content of this procedure, including Australian and International Standards and legislation.

Document ID	Document Title
	National Code of Practice for the Prevention of Musculoskeletal Disorders from Performing Manual Tasks at Work (2007)
	Work Health Safety Act 2011 (QLD)
	Work Health Safety Regulations 2011 (QLD)
	Hazardous Manual Tasks Code of Practice 2011 (QLD)
	Occupational Safety and Health Act 1984 (WA)
	Occupational Safety and Health regulations 1996 (WA)
	Code of Practice Manual tasks 2010 (WA)
SCEE-BS-HS-PRO-0001	Job Hazard Analysis Procedure
SCEE-BS-HS-PRO-0004	Event Management & Investigation Procedure
SCEE-BS-HS-WIN-0006	Event Reporting Work Instruction
SCEE-BS-HS-WIN-0007	Event Investigation Work Instruction
SCEE-BS-HS-LIS-0013	Manual Handling – Risk Assessment Checklist

8 Related Documents

Related documents are those that have a relationship with this document, for example if this was the Operational Risk Management procedure related documents would include the work instruction to complete a JHA, the JHA template, Take 5 work instruction and booklet, etc.

Document ID	Document Title
SCEE-BS-HS-TEM-0008	JHA Template
SCEE-BS-HS-TEM-0009	JHA Register
SCEE-BS-RM-PRO-0002	Operational Risk Procedure