

Procedure

Hazardous Manual Tasks



1. Purpose

This procedure outlines the processes to identify hazardous manual tasks and eliminate or minimise their associated risks to Department of Planning, Transport and Infrastructure (DPTI) workers and other persons.

2. Scope

This procedure applies to all DPTI workers.

3. Definitions

| TERM | DEFINITIONS |
|--|--|
| Awkward posture | Where any part of the body is in an uncomfortable or unnatural position, such as: <ul style="list-style-type: none">• postures that are unbalanced or asymmetrical; and/or• postures that require extreme joint angles or bending and twisting. |
| Force | The amount of muscular effort required to perform a movement. |
| High force | Occurs in any tasks that: <ul style="list-style-type: none">• a worker describes as very demanding physically;• a worker needs help to do because of the effort it requires; and/or• require a stronger person or two persons to do the tasks. |
| Manual task | A task that requires a person to lift, lower, push, pull carry or otherwise move, hold or restrain any person, animal or thing. |
| Musculoskeletal disorder (MSD) | 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. |
| Personal Protective Equipment (PPE) | Any clothing, equipment, apparatus or substance (e.g. sunscreen) designed to be worn by a person and in order to protect the person from risks of injury or illness. |
| Posture | The position of various parts of the body during any activity. Safest posture occurs when a 'neutral' position is maintained by the joints and muscles being used near the middle of the full range of motion. |
| Repetitive force | Using force repeatedly over a period of time to move or support an object. |
| Repetitive movement | Using the same parts of the body to repeat similar movements over a period of time. |
| Sudden force | Jerky or unexpected movements while handling an item or load. Includes tasks where force is applied suddenly and with speed. |
| Sustained force | Occurs when force is applied continually over a period of time. |
| Sustained posture | Where part of or the whole body is kept in the same position for a prolonged period. |
| Vibration | Occurs when vibration is transmitted through the body. |

| TERM | DEFINITIONS |
|------------------|---|
| | Hand-arm vibration occurs when vibration is transferred through a vibrating tool, steering wheel or controls in heavy machinery to the hand and arm. |
| Worker | Any person who carries out work in any capacity for the department and may include: <ul style="list-style-type: none"> • employee; • trainee; • volunteer; • outworker; • apprentice; • work experience student; • contractor or sub-contractor; • employee of a contractor or sub-contractor; or • employee of a labour hire company assigned to work for DPTI. |
| Workplace | Any place where a Worker works and includes any place where such a person goes, or is likely to be, while at work. |

4. Procedure detail

4.1. What is a hazardous manual task

A hazardous manual task is an activity that requires 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:

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

These characteristics of hazardous manual tasks directly stress the body and can lead to injury.

4.2. Musculoskeletal disorders (MSDs)

Hazardous manual tasks can result in musculoskeletal disorders (MSDs), which may include the following conditions:

- 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 (e.g. carpal tunnel syndrome);
- muscular and vascular disorders as a result of hand-arm vibration;
- soft tissue hernias; and/or
- chronic pain.

MSDs can be caused by:

- gradual wear and tear of joints, ligaments, muscles and inter-vertebral discs, caused by repeated or continuous use of the same body parts, including static posture;
- sudden damage caused by strenuous activities or unexpected movements; and/or
- a combination of mechanisms, for example body tissue that has been weakened by cumulative damage may be vulnerable to sudden injury by lower forces.

4.3. Managing the risk of MSDs

Managers and supervisors must ensure risks associated with manual tasks that have the potential to cause MSDs are managed by:

- consulting with workers;
- identifying hazardous manual tasks in the workplace;
- assessing the risks of MSDs associated with the hazardous manual handling tasks;
- implementing and maintaining hazard control measures in accordance with the hierarchy of controls; and
- reviewing the effectiveness of hazard control measures.

See *Appendix 1* for a diagram of the risk management process for manual tasks.

4.3.1. Consulting with workers

Managers and supervisors must consult with workers as early as possible when planning to:

- introduce new tasks or change existing tasks;
- select new plant and equipment;
- refurbish, renovate or redesign existing workplaces; and
- carry out work in a new environment.

4.3.2. Identifying hazardous manual tasks

To manage risks arising from manual tasks it is necessary to identify those tasks that have potential to cause MSDs. Hazardous manual tasks can be identified through:

a) Communicating with workers

- Managers and supervisors should encourage workers to identify tasks that are repetitive, physically difficult to do, tiring, awkward or dangerous, or that cause discomfort. Workers can identify areas of discomfort using the [Hazardous Manual Tasks Discomfort Survey](#).
- Where workers are represented by a Health and Safety Representative (HSR), managers and supervisors must ensure the HSR is consulted and invited to participate in the process.

b) Reviewing existing information

- Reviewing records of workplace injuries and incidents, as well as any workers' compensation claims made for MSDs can identify which manual tasks may cause harm.
- Trends associated with particular tasks, situations or locations should be reviewed to assist in identifying which manual handling tasks should be addressed as a priority.
- Information about hazardous manual tasks can be obtained from inspection reports and safety committees, and advice is available from technical specialists and safety consultants.

c) Observing manual handling tasks

- Hazardous manual tasks can be identified by observing how people perform their work and focusing on people's posture and movements.

The [Hazardous Manual Tasks Identification Form](#) may be used to record findings.

4.3.3. Assessing manual handling risks

If a manual task has been identified as hazardous, managers and supervisors must ensure that a [Hazardous Manual Tasks Risk Assessment](#) is conducted. A risk assessment should also be undertaken if an MSD has occurred arising from a work process or practice, and whenever a manual task is about to be introduced or modified.

A risk assessment involves examining the identified hazardous manual task in more detail to help identify the different sources of risk and the controls to be implemented.

A risk assessment can help determine:

- 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 addressed.

Factors to be considered when conducting a risk assessment include:

- work area and design layout;
- the nature, size, weight or number of items handled in the manual task;
- systems of work; and
- the environment in which the manual task is performed.

4.3.4. Implementing risk control methods

The most effective control measure is to eliminate the risk. If this is not reasonably practicable, the risk must be minimised as far as is reasonably practicable. In accordance with the hierarchy of controls, managers and supervisors should consider the following control measures where appropriate:

| Hierarchy of Controls | Example of control measures |
|--------------------------------------|--|
| Elimination | <ul style="list-style-type: none"> • Automate the manual task • Deliver the goods directly to the point of use to eliminate multiple handling |
| 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 work stations that are height adjustable |
| Administration | <ul style="list-style-type: none"> • Rotate workers between different tasks • Train workers to use control measures when carrying out manual tasks |
| Personal Protective Equipment | <ul style="list-style-type: none"> • Supply shock absorbent shoes for work on hard concrete floors |

The [Hazardous Manual Tasks Risk Control Form](#) can assist in identifying controls for hazardous manual tasks.

Managers and supervisors must check that controls identified by the risk assessment are implemented before work commences. The [Hazardous Manual Tasks Control Action Sheet](#) can assist in implementing controls.

4.3.5. Monitoring and reviewing hazard controls

In reviewing the hazard controls, managers and supervisors must:

- Consider whether the control measures are working effectively in their design and operation, without creating new risks;
- If reasonably practicable, allow workers to trial solutions before they are made permanent (modifications may result in some initial discomfort until the body can adjust to the new methods);
- Develop work procedures to ensure that controls are understood and responsibilities are clear;
- Communicate to workers the reasons for change and how the changes affect them;
- Determine if there has been a reduction in the frequency and severity of MSDs; and
- Consider new information which may indicate current controls are no longer effective.

4.4. Information, instruction and supervision

Managers and supervisors are responsible for ensuring all workers who undertake hazardous manual tasks are provided with appropriate information, instruction and/or supervision, which will include information on:

- Manual task risk management, including the characteristics of hazardous manual tasks;
- Manual task risks specific to workgroups and the measures in place to control them;
- How to perform manual tasks safely, including the use of mechanical aids, tools, equipment and safe work instructions;
- How to report a hazard, fault or maintenance issue;
- Legislative requirements; and
- The requirements of this procedure.

5. Record management

Any records and documentation associated with this procedure must be maintained in accordance with legislative and departmental record keeping processes. Refer to the [DP009 Recordkeeping Policy](#) for information regarding records management.

6. Roles and responsibilities

| ROLE | RESPONSIBILITIES |
|---------------------------------|---|
| Managers and supervisors | Managers and supervisors must: <ul style="list-style-type: none"> • identify potential risks for hazardous manual tasks; • consult with their workers and HSRs in identifying potentially hazardous manual tasks; • implement appropriate control measures to eliminate or minimise risks related to hazardous manual tasks, as far as reasonably practicable; • ensure workers receive an induction in hazardous manual tasks, as required; • provide ongoing information and supervision in hazardous manual tasks; and • continuously review hazardous manual tasks solutions for effectiveness. |
| Workers | Workers must: <ul style="list-style-type: none"> • take reasonable care for their own health and safety; • comply with this procedure, local procedure and reasonable instructions given relating to hazardous manual tasks; • identify and report any issues that may lead to musculoskeletal disorders from performing their tasks; and |

| ROLE | RESPONSIBILITIES |
|------|--|
| | <ul style="list-style-type: none"> participate in the development and implementation of risk controls for hazardous manual tasks. |

7. Supporting documentation

- [Hazardous Manual Tasks Discomfort Survey](#)
- [Hazardous Manual Task Identification Form](#)
- [Hazardous Manual Tasks Risk Assessment](#)
- [Hazardous Manual Tasks Risk Control Form](#)
- [Hazardous Manual Tasks Control Action Sheet](#)

8. References

- *Work Health and Safety Act (SA) 2012*
- *Work Health and Safety Regulations (SA) 2012*
- *Safe Work Australia Hazardous Manual Tasks Code of Practice*

9. Appendix

Appendix 1: The Risk Management Process for Manual Tasks

10. Document Amendment Record

| Date | Version | Revision Description |
|---------------------------------|---------|----------------------|
| 04 January 2019 | 1.0 | Original Version |
| | | |
| Document Review Schedule | | 3 Yearly |

Appendix 1: The Risk Management Process for Manual Tasks

