Hazardous manual tasks

What is a hazardous manual task and who is at risk?

A hazardous manual task is a task that requires a person to lift, lower, push, pull, carry, move, hold or restrain a person, animal or thing, and involves one or more of the following factors:

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

Work activities which involve these physical factors can overload the body and lead to injury.

Physical hazards are present across a variety of manual tasks that you may do in your everyday activities. Some work practices involving lifting e.g. emptying bins, sustaining postures e.g. cleaning windows, vibration e.g. ride-on mowing, and using repetitive movements e.g. stocking library shelves, may increase your risk.

In schools, our most at risk staff include School Officers, Cleaners, Librarians and Teacher Aides due to the physically demanding nature of their roles.

In our organisation, 32% of all injuries are caused by hazardous manual tasks. In high risk groups, 37% of injuries are caused by hazardous manual tasks, with the average cost of sprain/strain injury being $5,561.

How can a hazardous manual task affect your health?

Hazardous manual tasks can contribute to musculoskeletal disorders (MSD). Musculoskeletal disorders include conditions such as:

- sprains and strains of muscles, ligaments and tendons
- back injuries e.g. damage to the muscles, tendons, ligaments, spinal discs, nerves, joints and bones
- joint and bone injuries or degeneration
- nerve injuries or compression
- muscular and vascular disorders as a result of hand-arm vibration
- soft tissue hernias
- chronic pain.

Musculoskeletal disorders occur in two ways:

- 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
- sudden damage caused by strenuous activity, or unexpected movements such as when loads being handled move or change position suddenly.

Injuries can also occur due to a combination of these two mechanisms.

Musculoskeletal disorders can impact on a person’s working ability and quality of life. The effects can be of short duration, longer term or result in a permanent injury

Stress is also closely linked with the onset of musculoskeletal disorders due to the psychological impact that stress has on our body. This means that if a worker is performing a hazardous manual task and is also stressed, then they are even more at risk of injury.
Who is responsible for managing hazardous manual tasks?

The Work Health and Safety Regulation 2011, Chapter 4, Part 4.2 specifically requires the management of risks related to hazardous manual tasks. There is also the general duty to protect the health and safety of workers in the workplace, which includes physical and psychological health.

Workplace factors such as high work load and low job control can reduce the physical resilience of workers and increase the risk of injuries resulting from hazardous manual task. Overall, principals/managers are responsible for workplace safety. Each worker also has a responsibility to work safely, follow reasonable instruction and report any hazards.

How do we manage hazardous manual tasks?

1. Identify hazards that could cause incidents, injuries or ill health. It is often difficult to identify hazards or tasks that are a priority to manage so consider tasks where:
   a. injuries have occurred
   b. lots of complaints are made
   c. tasks rated highly on risk assessment forms or surveys
   d. they are performed by a lot of workers
   e. tasks that are done a lot of the time.

2. Assess these activities by evaluating who might be harmed and how this might happen. Identify if any risk factors are present e.g.:
   a. force
   b. repetitive movement
   c. sustained or awkward posture
   d. vibration
   e. and possible contributing factors
      i. the design of the work area
      ii. the use of any tools or equipment
      iii. the systems of work used e.g. the way the task is performed
      iv. the nature of the load e.g. size, weight of persons, animals or things
      v. the way the work is organised.

3. Decide whether existing controls or precautions are adequate, or if more should be done. Look at the contributing factors to identify ways to control the overall risk.
   a. Implement or trial some control measures based on these contributing risk factors.
   b. Incidents and ill health can be prevented by eliminating, or at least reducing hazardous manual task risks. The following hierarchy of prevention measures is to be used:
      i. Elimination - consider whether the task can be avoided. Ask yourself 'is the task necessary'?
      ii. Engineering controls - if hazardous manual tasks cannot be avoided provide or use specialist equipment to assist in lifting/carrying/moving people or objects. For example:
         1. use bin lifters, hoists or fit-for-purpose trolleys
         2. use long handled tools instead of bending over, stretching or over reaching
         3. design or modify the work environment to eliminate risks arising from manual handling – consider altering the layout of work area so as to avoid twisting, sideways bending or excessive reaching or lifting.
      iii. Consider organisational changes. Such changes should only be considered if elimination or reduction of hazardous manual task risks is not possible. Dependent on the context and conditions, example may include: rotation of tasks, use additional staff to complete an intensive task, training in optimum technique for task and managing tasks to alleviate time-pressure constraints.
iv. Provide workers with information on the risks and health effects of hazardous manual tasks and training in the use of equipment and correct handling techniques. Focus training on:
   1. the types of control measures implemented
   2. methods of work including procedures e.g. how and when to use particular aids and assistive devices safely
   3. organisational requirements such as reporting problems or maintenance issues.

c. Monitor the risks, and review preventive measures to ensure new risks haven’t been created – which can happen! A well rounded approach to managing hazardous manual tasks in your workplace also includes:
   i. consulting with workers about their task requirements and their suggestions for improvements
   ii. evaluating risks before purchasing equipment
   iii. supplying fit-for-purpose equipment supported by a regular equipment maintenance program
   iv. encouraging staff to report hazards and actioning these reports

d. Investigate wellness programs that may help to improve the general physical and mental health of staff. Wellness programs are helpful as research indicates that stress is closely linked with the onset of sprain and strain injuries due to the physiological impact stress has on the body. Programs may assist to manage stress through increasing collegiate support, focusing on improved activity planning strategies or establishing management commitment.

e. Integrate sound rehabilitation and return to work strategies for workers with musculoskeletal disorders into local hazardous manual task workplace policy. This will improve workers health and well-being, prevent reductions in productivity and improve absenteeism rates

What can we do straight away?

Everyone can try to:
- Take breaks from repetitive work, change posture or introduce variation to the work.
- Plan work well to determine the best option, with the best equipment, and avoid double handling.
- Carry smaller loads and avoid the need to lift/carry/ move objects when your body is fatigued.
- Address plant and equipment maintenance.
- Be aware of correct manual handling techniques including using the right equipment.

5 easy ways to reduce injuries to staff at higher risk of injury:

1. Food waste is the greatest cause of weight in school bins. These are handled daily by cleaners. To reduce injury risks to cleaners, school communities could:
   a. Send uneaten food home with students - this helps reduce waste ‘bulk’ at school and parents will know what their children are eating.
   b. Introduce a ‘nude food’ program where the volume of food wrap and packaging waste is reduced.

2. Investigate outsourcing furniture removal/relocation if you haven’t already. Schools that do this report that outsourcing at the end of the year makes it so quick, easy and safe that they would never go back to having their schools officer and others undertaking this task.

3. Negotiate classroom furniture, bin placement, rubbish pickup and window closing strategies by consulting with cleaners and classroom teachers to reduce the amount of handling, bending, reaching and lifting cleaners are required to do during their routine end of day operations.
4. Involve multiple people in the job of setting up chairs in large halls/venues to reduce the risk to schools officers/maintenance staff. Rotate staff, use teams, or request participants to help place and stack chairs at the end of a session. Alternatively, reorganise or reschedule activities to reduce the amount of furniture movement.

5. Provide mechanical lifting aids such as trolleys to support staff who move equipment around as part of their role or receive regular deliveries (e.g. photocopy supplies, tuckshop, uniform shop, library). Arrange to have these items delivered as close as possible to the work area, and at a height that reduces the amount of handling and lifting required.

What resources are available for managing hazardous manual tasks?

The department has developed a range of resources for workplaces. These can be accessed on the Creating Healthier Workplaces website: Manual Handling and Ergonomics.

These resources are based on the national Participative Ergonomics for Manual Tasks (PErforM) program. PErforM aims to reduce hazardous manual task injury rates by involving workers as ‘task experts’ to find solutions to their specific health and safety issues. Workplace Health and Safety Queensland (WHSQ) have a variety of PErforM resources including training and professional development packages.

Other useful WHSQ hazardous manual task resources can be found here.