Workplace Health and Safety Queensland

# PErforM resource manual for workplace trainers

Guidelines for preparing and delivering the PErforM program



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## Introduction

## **Purpose**

The Participative Ergonomics for Manual Tasks (PErforM) program is a simplified manual tasks risk management program which involves workplace-based teams devising manual tasks solutions for their high risk manual tasks. It is not intended to replace existing systems or management processes, but serves as a framework for identifying and controlling manual tasks risks. The PErforM program was developed by Workplace Health and Safety Queensland (WHSQ) in conjunction with the University of Queensland and the Curtin University of Technology.

This resource manual provides guidance on preparing for and delivering the PErforM program. This manual can be used in conjunction with the other PErforM resources:

- PErforM for management PowerPoint presentation
- PErforM question and answer handout
- PErforM for trainers PowerPoint presentation
- PErforM for work teams PowerPoint presentation
- Participative Ergonomics for Manual Tasks handbook.

## Benefits to managing health and safety

Overall, managing health and safety, including manual tasks risks, makes good business sense because it can:

- Increase productivity as workers are able to work 'smarter rather than harder'.
- Increase quality as there may be less errors and subsequently less waste.
- **Increase morale** as it may improve the work environment and the workers feel that their employer cares about their work conditions and health and wellbeing.
- **Increase recruitment and retention** as workers may be more selective about who they work for given the current skills shortage. Workplaces with good health and safety practices may be more attractive to workers.
- **Decrease injuries and absenteeism** which both impact on productivity and result in increased costs, i.e. for hiring and training new staff, workers compensation premiums, and common law claims, not to mention the pain and suffering caused to the injured worker and their families.

## Manual tasks and musculoskeletal disorders

Musculoskeletal disorders are a real and growing problem. In 2009–10, musculoskeletal disorders accounted almost 62 per cent of serious non-fatal workers' compensation claims in Queensland, which represents an increase of 3 percentage points since 2003-04. Statistics indicate that between the financial years 2003–04 and 2009-10, the number of serious work-related musculoskeletal disorders has steadily increased by 20.3 per cent.

Musculoskeletal disorders include a wide range of inflammatory and degenerative conditions affecting the muscles, tendons, ligaments, joints, peripheral nerves and supporting blood vessels. Musculoskeletal disorders may result from an acute one-off event and/or exposure over a period of time.

Musculoskeletal disorders are caused by:

- body stressing from hazardous manual tasks
- slips, trips and falls at level and at height
- hitting or being hit by objects
- contributing psychosocial factors.

Research into musculoskeletal disorders recognises a link to specific manual tasks risk factors that cause injury. Preventing or minimising exposure to these risk factors will reduce the risk of injury for workers.

Answers to frequently asked questions about issues relating to musculoskeletal disorders and health and safety are provided in Appendix 4.

## The PErforM program

The PErforM program is based on a participative ergonomics approach which is an internationally recommended approach for reducing musculoskeletal disorders. The idea of PErforM is that the worker is the expert in performing their work tasks. PErforM provides a framework for assisting workers to identify and control manual tasks risks within their workplace. As part of this program, work teams are provided with training about manual tasks risks and participate in facilitated workshops to generate control ideas.

The advantages to this method include:

- Developing effective controls that will target the key risk factors and be designed for the work requirements to suit the workers.
- Giving workers a greater sense of ownership and commitment to use the controls once they are implemented.

Participative ergonomics relies on good communication between all levels of staff and can also contribute to improved worker morale and productivity.

The PErforM program was originally developed by WHSQ, the University of Queensland and the Curtin University of Technology as part of the manual tasks research project. It has been used in a variety of industries and has been successfully piloted in the manufacturing industry during 2009-2010.

Scientific research has demonstrated that PErforM has a positive effect on decreasing manual tasks risk. A significant reduction in manual task injury risks, as assessed by WHSQ Inspectors, was reported for workplaces receiving the PErforM intervention.

For further information about the PErforM program, refer to the reference list at the back of the Participative Ergonomics for Manual Tasks handbook.

#### PErforM resources

WHSQ has developed a range of resources to assist organisations to implement the PErforM program. These resources include the:

- PErforM for management PowerPoint presentation, which provides managers with a 45 minute overview of the PErforM program including:
  - the benefits and elements of the program
  - the resources required

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- leadership and management support required .
- PErforM 'frequently asked questions' document, which answers common questions asked by managers about the PErforM program.
- PErforM for trainers PowerPoint presentation, which includes comprehensive notes pages to assist the trainer in delivering PErforM training.
- PErforM for work teams PowerPoint presentation, which includes comprehensive notes pages to assist trainers to train work teams about the manual tasks risk factors and in using the PErforM risk assessment tool.
- PErforM resource manual, which provides guidance on preparing for and delivering the PErforM program including evaluation.
- Participative Ergonomics for Manual Tasks handbook which includes:
  - information about manual tasks risk factors

- the PErforM risk assessment tool
- case studies.

## Process for implementing PErforM

The following provides an overview of the process undertaken to implement PErforM at a workplace. This process can be modified to suit the organisation's needs.

## 1. Introductory stage

- a) Introduce the program to management/leaders using the PErforM for management PowerPoint presentation.
- b) Secure management commitment. It has been found that the success of PErforM is dependent on commitment from managers and supervisors especially when there may be perceived competing priorities such as production and safety.
- c) Appoint a person to facilitate the introduction and ongoing use of PErforM at the workplace/within an organisation (refer to Appendix 3 Criteria for PErforM champions). A skilled and trained champion plays a critical role in promoting and driving the program including ensuring that the necessary communication occurs at all levels of the organisation and that the essential activities are undertaken. Appoint a trainer to deliver the PErforM for work teams training. This could involve training on-site staff or using an external provider (refer to Appendix 3 Criteria for PErforM champions). Depending on the size of the organisation, the champion and trainer may be the same person.
- d) Identify work teams or a committee (approximately 8–10 people ideally) to participate in the training session. The mix of people involved in the program may vary depending on the industry, tasks and work area being considered. It is essential to involve those doing the work as well as any other people impacted on by changes such as maintenance or cleaning staff. Other significant people include those with decision making capacity as well as engineering and innovative thinkers.

Suitable work teams may be identified for a variety of reasons, for example:

- the work they perform involves high risk manual tasks
- the team has experienced a number of manual tasks related injuries or incidents, and/or
- their willingness to participate in the program.
- e) Determine appropriate high risk manual tasks for assessment in the workshops.
- f) Obtain video footage (refer to Appendix 6 Handy tips for taking video footage).
- g) Prepare for training and workshop sessions (refer to Appendix 1 PErforM for work teams workshop preparation guidelines).

# 2. PErforM for trainers workshop (approximately one day however length of session can be modified depending upon the skill level of the trainer/s)

Workplace coordinator and trainer/s participate in PErforM for trainers workshop delivered by a PErforM trainer.

#### 3. PErforM for work teams workshop (approximately 2hrs)

PErforM training is delivered by the nominated workplace trainer/s to identified work teams, supervisors (and relevant others). This training is essential and aims to provide workers with the knowledge to work within a manual tasks risk management framework in order to:

- identify their high risk tasks
- assess the risks associated with these tasks
- develop ideas for controls.

This workshop includes performing a risk assessment on a problem workplace manual task by analysing video footage of the task and using the PErforM risk assessment tool (refer to Appendix 2).

It is important to consider adult learning principles and the literacy levels of those people being trained and plan strategies to ensure active participation. Nominating a scribe for the group,

increasing the use of visual images, reducing the amount of text or simplify the language on the power point slides are some ways that can assist in training people with low literacy levels or English as a second language.

Topics covered by this training include:

- mechanism of injury associated with manual tasks
- manual tasks risk factors
- hazard identification
- use of the PErforM risk assessment tool
- hierarchy of controls
- strategies for eliminating and controlling manual tasks risks.

#### 4. Implementation

The implementation stage of the process involves facilitation by the workplace champion to help teams perform ongoing risk assessments and develop, implement and review controls. Assessments can be combined with the PErforM for work teams workshop, however, more time would need to be set aside to complete risk assessments. After the initial training, risk assessments of the high risk tasks are conducted over a period of time until completed e.g. one to two hours a month is set aside for the risk assessments.

The trainer assists work teams to assess their high risk manual tasks and develop control ideas. The risk assessment is done through:

- analysing video footage of the chosen high risk manual task/s
- group discussion, and
- using the PErforM risk assessment tool (refer to Appendix 2).

Introducing the PErforM program in the organisation's health and safety management system will help to enhance the effectiveness of the program as well as developing action plans that document what needs to be done, by who and by when. The PErforM program could be introduced into the workplace systems by developing procedures that include:

- doing a PErforM risk assessment after an incident as part of the follow up investigation
- when developing job safety procedures, or
- as part of purchasing processes.

Example of successful implementation: In the mining industry each worksite formed a committee to coordinate the implementation and evaluation of the control ideas.

The committee was usually composed of:

- safety staff
- the site engineer
- a worker and management representative.

These committees worked with everyone involved to take ownership of the PErforM process to make it a permanent part of the workplace systems.

#### 5. Evaluation of the implementation of the PErforM program

Evaluation of the implementation of the PErforM program in the workplace is a necessary stage of the process to determine if the required results have been achieved and if not what needs to be changed.

Monitoring the effectiveness of the program can be done using a combination of positive and negative performance indicators to identify and measure key performance indicators.

#### Positive performance indicators

Positive (leading) performance indicators (PPIs):

focus on preventative workplace activities

- generally target key areas for improvement
- are used to measure how the system is working.

Workplace performance is indicated by the number of PPIs achieved e.g. the higher the number of risk assessments performed the better the performance. Examples of PPIs include the:

- number of workgroups using PErforM
- number of PErforM risk assessments completed
- use of the PErforM process after incidents
- number of safety meetings conducted
- number of manual tasks issues that have been rectified and how long that process took
- percentage of workers compensation claims completed within a fixed time period.

#### **Negative performance indicators**

Negative (lagging) performance indicators measure the failures that have occurred and are of more value when looking at the end result or effectiveness of the system. A low number of negative performance indicators achieved indicates better performance, for example, none or a few minor injuries would indicate a better result than a high number of severe injuries. Examples of negative performance indicators include:

- number of injuries
- severity of injuries
- cost of injuries.

#### Tips for the successful implementation of PErforM

The following tips have been developed as a result of the knowledge gained from the implementation of PErforM in a variety of industries. Following these tips will assist in the successful implementation of PErforM in the workplace.

#### **Tips**

- Participants who should participate in the PErforM process include:
  - work teams
  - supervisors
  - staff who make budgetary and management decisions
  - staff who might be affected by the implementation of controls i.e. maintenance staff who will need to maintain the new or modified equipment or staff who can assist with the design of controls such as engineers.
- PErforM works well with the involvement of workplace health and safety representatives and workplace health and safety committees as they can provide advice regarding the decisions made.
- For difficult and complex tasks, the organisation may need to engage an expert, such as an ergonomics consultant, to help.
- Engaging the assistance of ergonomics professional to act as a resource and assist in implementing the PErforM program may improve the quality of the outcomes of the program.
- Best implemented as part of an organisation's health and safety management system.
- Ongoing communication between management, workers and relevant others about what is happening is critical. For example, when designing new or modifying existing controls, engineers should consult with workers throughout the process to ensure that the end product will suit the worker's requirements. Keeping everyone informed, including those who work different shifts, can be done through existing communication channels such as noticeboards, toolbox talks, or emails.
- Focus on a few simple tasks and easily implemented controls initially to gain confidence with the process and to demonstrate that it can work.
- It is important to have a positive, 'can do' attitude and to be realistic. Solutions to all problems may not be possible but it is important to remember that there are always some things that can be done. Small changes can make a big difference to reducing the overall level of risk—so focus on what can be done.

#### **Limitations of the PErforM program**

PErforM is a simplified manual tasks risk management approach and, as such, there are some compromises with the use of PErforM. For example:

- Complex tasks may require the use of other ergonomic assessment tools, or the engagement
  of an expert to assist with the assessment and development of controls. The need for greater
  expertise may also be identified when prioritising control options.
- The risk assessment tool does not take into account the cumulative effect of the range of manual tasks a worker may perform during their shift. As a result, work teams will need to make some judgements about:
  - which tasks are the hazardous tasks
  - the priority order for their assessment
  - whether the worker is being exposed to similar risk factors throughout the shift despite performing different tasks.

If this is the case, consider controls which minimise the cumulative risk.

#### WHSQ evaluation

It is important for WHSQ to evaluate the implementation of the PErforM program in workplaces to be able to continue improving the PErforM program and to develop information and resources for industry. The evaluation will be conducted by WHSQ for a selection of organisations that have received PErforM 'train-the-trainer' training and wish to participate in this process.

The aim of the evaluation is to determine any barriers or difficulties encountered when implementing the PErforM program as well as positive outcomes from the program. The evaluation will consist of:

• a survey emailed out to the workplace at 6 -12months after attendance to a trainers workshop.

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## Appendix 1: PErforM for work teams workshop preparation guidelines

### Tasks to complete

## 4 weeks prior:

- Book training room, AV equipment (projector screen, laptop, data projector), whiteboard and catering. Ensure venue has sufficient room for group work, tables and chairs.
- Notify relevant work team about workshop details e.g. date and location of training.
- Obtain video of high risk manual tasks and insert relevant workplace video and photos in PErforM for work teams PowerPoint presentation.

#### 2 weeks prior:

• Finalise timing for workshop (refer to Appendix 6).

#### 1 week prior (or pre-workshop):

- Prepare name tags and list attendees who plan to attend the workshop.
- Prepare resource packs for attendees. Packs may contain the following items:

| Order<br>in<br>pack | ltem  | How to prepare  | No.<br>required |
|---------------------|---|---|-----------------|
| · 1                 | Training session outline/program  | One page.   |                 |
| 2                   | PowerPoint handout notes for trainers as well as the work teams presentation (available from the PowerPoint presentation) | 3 slides to a page. Double-sided and staple.  |                 |
| 3                   | Participative Ergonomics for<br>Manual Tasks handbook   | Provided or photocopy double-sided and print in colour.   |                 |
| 4                   | 2 Blank PErforM risk assessment tool worksheets 1 and 2 (Appendix 1).   | Double-sided. Print on coloured paper (Note: Printing the risk assessment tool on coloured paper will make it easier for participants to find the tool in their folders). |                 |
| 5                   | Optional: Examples of industry relevant solutions if available.   | Double-sided and staple.  |                 |
| 6                   | Optional: <u>Guide to preventing</u> <u>slips, trips and falls</u>  | Print from WHSQ website: www.worksafe.qld.gov.au.   |                 |
| 7                   | Optional: <u>Sprains and strains</u><br><u>prevention booklet</u>   | Print from WHSQ website: www.worksafe.qld.gov.au.   |                 |
| 8                   | Post-workshop evaluation form.  | Different colour from the pre-workshop form.  |                 |

## PErforM for work teams workshop plan

The following workshop plan provides guidance on the delivery of the work team's workshop.

Allow 2 hours for delivery of the work teams workshop (includes 15 minute break)

Allow 1 hour for any of the facilitated risk assessments following the training. This may be conducted immediately following the work teams workshop, or scheduled for a later date.

| Timing   | ✓ | Activity   | PowerPoint slide |
|----------|---|--|------------------|
| 01:00    |   | Set up laptop and data projector—it's best to test the projector the   |                  |
| before   | : | day before as it is an essential part of the presentation.   |                  |
| start    | : | Set up name tags and sign in sheet for attendees.  |                  |
| time     | : | Set up refreshments, water and glasses for attendees.  | :                |
| 10min    |   | Start time and opening   | 1                |
|          |   | Welcome and introduce presenter/s and participants.  |                  |
|          |   | Introduction to PErforM  | 2,3              |
|          |   | Aims of session.   |                  |
| 5min     |   | Workshop outline.  |                  |
| Jillill  |   | Background information about PErforM.  |                  |
|          |   | How PErforM will be implemented in the organisation.   |                  |
|          |   | Manual tasks   | 4,5,6            |
| 40       |   | Legislation.   |                  |
| 10min    |   | Definition of manual tasks.  |                  |
|          |   | Group discussion to identify manual tasks they perform.  |                  |
|          |   | Manual tasks related injuries.   |                  |
|          |   | Risk factors   | 7 - 12           |
| 15min    |   | Explanation of risk factors.   |                  |
|          |   | Risk assessment  | 13, 14,15        |
| 5min     |   | Identify hazardous manual tasks.   |                  |
|          |   | Assess the risk.   |                  |
|          |   | PErforM risk assessment tool   | 16 - 21          |
| 10min    |   | Explanation of the PErforM risk assessment tool and worksheets.  |                  |
|          |   | Session break (10 min)   | 00 00 04         |
| 45       |   | Practical Disk assessment and assessment   | 22, 23,24        |
| 15min    |   | Risk assessment and case study.  Risk control  | 25 - 32          |
| 10min    |   | Explanation of hierarchy of control and control options.   | 25 - 32          |
| 10111111 |   | Practical  | 33-41            |
| 25min    |   | Risk control suggestions and case study.   | 33-41            |
| 20111111 |   | Monitor and review.  |                  |
|          |   | Evaluation and close   | 42-45            |
|          |   | <ul> <li>Ensure post–workshop evaluation forms are filled out and collected.</li> </ul>  | 72-73            |
| 5min     |   | <ul> <li>Ensure post—workshop evaluation forms are filled out and collected.</li> <li>Explain what actions will be taken after the workshop to progress</li> </ul> |                  |
|          |   | implementation of controls identified and future risk assessments.   |                  |
|          |   | <ul> <li>Thank participants.</li> </ul>  |                  |
| 03:00    |   | Finish   |                  |
|          |   |  |                  |

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## Appendix 2: PErforM Risk assessment tool

## Worksheet 1—Manual tasks risk assessment form

PErforM - Participative Ergonomics for Manual Tasks

Manual tasks risk assessment form

| Date and Workplac   | e                      |  |  |
|---------------------|------------------------|--|--|
| Date:               | Workplace:             |  |  |
| Risk assessors      |                        |  |  |
| Work unit/team:     |                        |  |  |
| Positions:          |                        |  |  |
| Names:              |                        |  |  |
| Task description    |                        |  |  |
| Name of task:       |                        |  |  |
| Why was this task   | selected:              |  |  |
| Location where tas  | k occurs:              |  |  |
| Who performs the t  | ask:                   |  |  |
| General description | 1:                     |  |  |
| Postures:           |                        |  |  |
| Forceful/muscular e | exertions:             |  |  |
| Repetition and dura | ation:                 |  |  |
| Tools or equipment  | t used:                |  |  |
| Work/task organisa  | ation and environment: |  |  |

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## Worksheet 2—Risk factor assessment

- 1. Indicate on the body chart which area(s) of the body you feel are affected by the task.
- 2. If more than one body part is affected, you may shade the different body parts in different colours. If so, use the matching colour when scoring the risk factors (e.g. red for arms on the body and score sheet, blue for low back on the body and score sheet).
- 3. Give each risk factor a score out of five. One (1) is when the risk factor is not present and five (5) is when the risk factor is the most severe level they have experienced.

| Exertion -H quickly          | ow much force i | s the person using?              | ' – think about st | arting or stopping             | Body part      |
|------------------------------|-----------------|----------------------------------|--------------------|--------------------------------|----------------|
| 1<br>No effort               | 2               | 3<br>Moderate<br>force & speed   | 4                  | 5<br>Maximum<br>force or speed |                |
| Awkward p                    | osture - Hov    | v awkward is the pe              | rson's posture?    |                                |                |
| 1<br>All postures<br>neutral | 2               | 3<br>Moderately<br>uncomfortable | 4                  | 5<br>Very<br>uncomfortable     | neck           |
| Vibration-                   | How much a      | re the whole body o              | r hand(s) being v  | vibrated?                      | shoulder back  |
| 1                            | 2               | 3                                | 4                  | 5                              | low back       |
| None                         |                 | Moderate                         |                    | Extreme                        | wrist/<br>hand |
| Duration -                   | How long        | is the action perform            | ned for?           |                                | knee           |
| 1 < 10                       | 2               | 3                                | 4                  | 5                              | low leg        |
| minutes                      | 10-30 min       | 30 min – 1 hr                    | 1 – 2 hrs          | > 2 hrs                        | ankle/foot     |
| Repetition-                  | How ofter       | n are similar actions            | done?              |                                | Back           |
| 1<br>No                      | 2               | 3 cycle time                     | 4                  | 5 cycle time                   |                |

## Risk controls

| (eliminate, substitute, engineer | ) |  |  |
|----------------------------------|---|--|--|
|                                  |   |  |  |
|                                  |   |  |  |
|                                  |   |  |  |
|                                  |   |  |  |
|                                  |   |  |  |
|                                  |   |  |  |

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## Appendix 3: Criteria for workplace PErforM champion

When choosing a champion to implement the PErforM program, it is important to identify people with the necessary attributes and skills. This is a critical role for the implementation of PErforM and will a significant impact on the success of the program. The following identifies the attributes and skill required to fulfil this role.

- Occupies a position which has access to management and workers.
- Good communication skills.
- Credibility with workers and management.
- Seen to be reasonably neutral.
- Able to motivate people and make things happen.
- High level of enthusiasm.
- Skills and knowledge regarding manual tasks risk management.
- Presentation and facilitation skills.
- Has completed the PErforM for trainers training.
- Skills and knowledge regarding manual tasks risk management.

## Appendix 4: Frequently asked questions

Musculoskeletal disorders and health and safety

#### Question

# What are hazardous manual tasks?

#### **Answer**

Hazardous manual tasks require a person to lift, lower, push, pull, carry, move, hold or restrain a person, animal or thing. Hazardous manual tasks involve one or more of the following:

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

Hazardous manual tasks can contribute to musculoskeletal injuries, which can be permanent and impact on a person's working ability and quality of life, as well as the productivity and economic performance of the company that employs them. Musculoskeletal injuries include:

- muscle strains and sprains
- ligament or tendon rupture
- prolapsed intervertebral discs
- tendonitis of the shoulders and elbows
- carpal tunnel syndrome.

## How much can I safely lift?

Neither the <u>Work Health and Safety Regulation 2011</u> (Part 4.2 Hazardous manual tasks) or the <u>Hazardous Manual Tasks Code of Practice 2011</u> specify weight limits for lifting. This is because there are many factors that impact on the risk, not just the weight of the item being handled.

The Hazardous Manual Task Regulation states that a 'person conducting a business or undertaking must manage risks to health and safety relating to a musculoskeletal disorder associated with a hazardous manual task'.

When determining the control measures to implement to manage the risks associated with hazardous manual tasks, all relevant factors that may contribute to a sprain or strain must be considered, including:

- the postures, movements, forces and vibration relating to the task
- the duration and frequency of the task
- workplace environmental conditions that may affect the task or the worker performing the task
- the design of the work area
- the layout of the workplace
- the systems of work used
- the nature, size, weight or number of persons, animals or things involved in carrying out the task.

# Is team lifting an adequate control for manual handling?

Team lifting brings its own risks; task redesign or use of mechanical aids is preferred. Problems with team lifting include:

- workers not being matched in size, physical strength or experience
- workers not exerting force simultaneously
- less force being exerted by workers in team lifting situations
- the load not being shared equally
- unexpected increases in the load and/or a change in balance occurring if one team member loses their grip or balance.

## What is the best way to lift?

There is no 'best way' to lift. Any manual lifting that requires force, awkward or static postures or is repetitive contains some risk of injury.

The question that should be asked is 'Why are you lifting?' Task redesign and/or the use of mechanical aids that eliminate the need to lift are always preferred. If loads must be handled manually, there are some guidelines in the *Hazardous Manual Tasks Code of Practice 2011*.

# Is training workers in lifting techniques a good control?

Research has demonstrated that <u>teaching lifting techniques is not an effective intervention</u>. The risk isn't controlled and it relies on worker behaviour.

In the past, training in manual handling techniques has focused on teaching workers the 'straight back and bent knees' lifting principles. However, research evidence has demonstrated that:

- A program based on teaching workers to lift relies on human behaviour, which varies in response to a range of workplace factors. Manual task programs need to be comprehensive and focused on design and engineering controls to remove the need for manual handling.
- The 'straight back' lifting principles cannot be easily applied to work tasks and are ineffective in reducing injuries.
- Lifting is one small part of manual handling requirements in workplaces.
   Other related risks in handling, such as pushing, pulling and carrying, are often overlooked.
- Workers must be trained in sufficient depth to allow them to perform their job safely. Training must be focused on:
  - the types of control measures implemented
  - methods of work including procedures (e.g. how and when to use particular aids and assistive devices safely)
  - organisational requirements such as reporting problems or maintenance issues.

The *Hazardous Manual Tasks Code of Practice 2011* provides guidance on the requirements for manual tasks training.

How do we know that the worker's injury didn't occur on the weekend? What if a worker has a pre-existing condition?

Good risk management practices and good record keeping are the best defence against questionable claims. Risk management systems should include identification, assessment and control of their hazardous manual tasks.

This issue is significant given the ageing workforce and obesity. The focus should be on risk, not the individual. The question that should be asked is 'Is there an uncontrolled risk?' Individual factors such as age and obesity are considered but they are not the first or only factors.

Aren't we building a nation of softies by getting rid of the hard yakka? Is pre-employment screening a good way to stop sprains and strains?

Workplaces have an obligation to ensure the health and safety of all workers. If the employer is concerned about a worker's ability to do their job, the employer can refer the worker to a health professional for an assessment. Workplaces with hazardous manual tasks have an obligation to ensure the health and safety of their workers. Workers are no longer expected to perform excessive physical work as technology has improved and workplaces have recognised they need to control the risk of injury. Pre-employment screening should not be relied on as the only control for manual tasks. The focus should always be on reducing manual tasks risks through elimination or engineering changes. Often, it is far more difficult to accurately determine a worker's capacity than it is to change the way a job is done to reduce the manual task risk.

Are pre-work stretching and exercises good methods of controlling manual tasks risks? Do back belts work? Research evidence shows that stretching programs do not prevent injury. The focus should be on controlling the risk by eliminating or modifying the hazardous tasks.

No. Abdominal belts are not considered effective personal protective equipment as they have not been shown to offer protection against the risk of back injury. The focus should be on controlling the manual tasks risk.

Further information can be obtained from the WorkSafe Victoria's Guidance Note: <u>Back belts are not effective in reducing back injuries</u> (www.worksafe.vic.gov.au).

Are gym balls recommended at the office workstation?

No. Gym balls are rehabilitation equipment and not office furniture. Gym balls are unstable and increase the risk of a person falling, are not adjustable to ensure appropriate working heights, and do not provide adequate back support for people sitting at their workstation for extended periods.

Further information can be obtained from the WorkSafe Victoria's Guidance Note: <u>Fitness ball is not suitable as a chair</u> (www.worksafe.vic.gov.au).

Men can lift heavier things than women. Why can't the boys do the lifting? On average, women possess about two-thirds the strength of men. Whenever workplaces advise they 'get the men to do the lifting' it is a flag that the task may be hazardous as it requires high physical effort. The workplace should assess the task and use other methods of controlling the risk.

Is work conditioning important?

Good workplaces recognise the need for workers to adapt and develop job fitness after holidays, illness or during rehabilitation. If a worker is new to a job, the tasks set during the first few weeks may not be as demanding as those set for an experienced worker. A reduced demand (pace, load, etc.) as the worker conditions themselves to the environment allows the worker time to adapt to the conditions.

People in gyms do weight training. How is this different to lifting weights at work?

Weight training in a gym is performed in a controlled environment and very carefully monitored to ensure maintenance of good posture. Weights are usually increased over a period of time, usually around three times a week, for a short duration. The training usually only targets muscle groups for a specific number of repetitions and sets. This is different than the requirements workers may be exposed to in the workplace.

Do wellness programs reduce manual tasks risks?

Wellness programs should be encouraged as they can have benefits for workers' general wellbeing and health. However, they should not be implemented in place of good risk management of manual tasks.

What is ergonomics?

Ergonomics is about the fit between people and the work they do. 'Good ergonomics' is achieved when the work a person does is designed to suit their physical and mental abilities. For example, the layout and height of work benches suit the workers using them; gauges and dials on control panels are easily read and understood so that mistakes are not made; and work systems promote effective interaction between the workers, materials and equipment.

Isn't ergonomics just common sense?

Reliance on workers using their common sense is not an adequate control. One person's common sense is not necessarily the same as another person's. Good sense is (usually) acquired through knowledge and experience.

# What is participative ergonomics?

Participative ergonomics is about workers at all levels of an organisation working together to find solutions to health and safety issues. This involves teaching workers and others—such as engineering and maintenance personnel—basic ergonomics principles, allowing them to draw on their own work experience to suggest solutions to work-related ergonomics problems.

Participative ergonomics enables organisations to identify and assess problems more effectively as well as develop ideas about how to fix them. It also provides management with better information about ergonomics issues in their workplace.

There is an increasing body of research supporting the use of participative ergonomics. The research shows that this approach decreases manual tasks risks and reduces musculoskeletal injuries, workers' compensation claims and days lost to absence due to sickness.

### Health and safety

If I enforce the rules then workers will leave, and it's too hard to get workers.

Should I get a consultant?

Workers have been here for years (or doing the job the same way for years). Suggested response: This is really a problem of ensuring that an employer's expectations are clear and enforcing workplace policy. If you as an employer expect people to follow procedures, make it clear that this is your expectation and their responsibility. Following procedures is a matter of adhering to company policy, and failure to follow procedures should be addressed the way you would handle other breaches of company policy; through your organisation's disciplinary process.

Suggested response: Consultants can assist you in developing a system; however no one knows your business better than you do. When choosing a consultant, it should be someone who has experience that is relevant to your business/industry. Also, you should have input into the work that is being done to ensure it is relevant to your business and meets your needs. This is really about old versus new culture, and is a complicated issue. It usually arises in discussions about barriers to implementation and generally presents as variations on the 'you can't teach an old dog new tricks' theme.

Suggested response: Firstly, recognise that this is not an easy matter. If people have been doing something the same way for a long time, it's because the employer has been letting it go along that way. It's a management issue. One way to get people to change behaviour is to involve them in problem-solving and other reforms like developing procedures. Once they have ownership of the new process they are more likely to stick to it.

Where workers are simply not cooperating, you may just have to accept that some people are slow to change. Concentrate on the younger or newer workers who may be less resistant.

This issue often comes up in discussions about safe work procedures training, or barriers to implementation.

# Workers are not following procedures.

Suggested response: This is really a problem of ensuring that an employer's expectations are clear and enforcing workplace policy. If you as an employer expect people to follow procedures, make it clear that this is your expectation and their responsibility. Following procedures is a matter of adhering to company policy, and failure to follow procedures should be addressed the way you would handle other breaches of company policy; through your organisation's disciplinary process.

#### Authority.

This issue relates to the ability for people responsible for ensuring that employees follow procedures and stick to other workplace requirements to carry out that responsibility. If the issue is not raised during discussions, it should be raised.

Contractors and contracting out responsibilities.

Suggested response: It is important that if a supervisor is responsible for ensuring that workers comply with workplace requirements including following safe work procedures using PPE, etc., they need to have the authority to carry out that responsibility and that everyone in the workplace is aware that the supervisor has this authority.

This issue has arisen in the context of manufacturers who engage a contractor to install products on their behalf, or where a furniture removal company engages a specialist to move a piano. The issue concerns the mistaken belief that the contractor assumes all responsibility for health and safety matters at the worksite, in particular when the employer (e.g. manufacturer or removalist) is not at the site.

Suggested response: If an employer has engaged a contractor to carry out work on their behalf, the contractor is performing work arising from the employer's undertaking. Any safety matters that come up therefore are arising from the employer's undertaking. This makes the employer responsible for health and safety matters regardless of whether they are on site or not.

## Appendix 5: Evaluation

## Work teams PErforM workshops

| We                         | e hope you enjoyed the workshop. Please take a few minutes to answer the question  | S.       |
|----------------------------|--|----------|
| Yo                         | our responses will assist us in developing future programs and let us know how we are                                    | e doing. |
| Lo                         | cation of workshop: Date:  | -        |
| Wł                         | nat is your job?   |          |
| Ab                         | pout manual tasks:   |          |
| Tr                         | ue (T) or False (F) (circle the correct answer)  |          |
| 1.                         | Weight lifting limits are not an effective way of controlling manual task risk   | T/F      |
| 2.                         | Teaching people how to lift safely is an effective way to reduce manual task risk.                                       | T/F      |
| 3.                         | Design controls (e.g. changes to workstations, tools or equipment) eliminate or reduce your exposure to manual task risk | T/ F     |
| 4.                         | Risk controls should focus on eliminating the task or redesign   | T/F      |
| <b>5</b> .                 | Lifting a heavy load as a 'one off' is the most common cause of injury   | T/F      |
| 6.                         | Name the five (5) manual tasks risk factors.   |          |
| 1.<br>2.<br>3.<br>4.<br>5. |  |          |

## Please tell us what you thought about the workshop:

|     |   | Strongly<br>Agree | Agree | Disagree | Strongly<br>Disagree |
|-----|---|-------------------|-------|----------|----------------------|
| 7.  | The information was clear and concise.                |                   |       |          |                      |
| 8.  | The information was easy to understand.               |                   |       |          |                      |
| 9.  | The speaker/s presented the information well.         |                   |       |          |                      |
| 10. | The information presented was relevant to me.         |                   |       |          |                      |
| 11. | I have learnt more about manual task risk management. |                   |       |          |                      |

| 12. Please rate yo | ur overall satisfa                   | ction with this worksho              | p.           |                     |  |  |  |  |
|--------------------|--------------------------------------|--------------------------------------|--------------|---------------------|--|--|--|--|
| ☐ Very satisfied   | Satisfied                            | ☐ Neither satisfied nor dissatisfied | Dissatisfied | ☐ Very dissatisfied |  |  |  |  |
| 13. What did the p | 13. What did the presenters do well? |                                      |              |                     |  |  |  |  |
|                    |                                      |                                      |              |                     |  |  |  |  |
|                    |                                      |                                      |              |                     |  |  |  |  |
| 14. What can the p | oresenters impro                     | ve?                                  |              |                     |  |  |  |  |
|                    |                                      |                                      |              |                     |  |  |  |  |
|                    |                                      |                                      |              |                     |  |  |  |  |

## Appendix 6: Handy tips for taking video footage

The PErforM program focuses on the work your organisation's workers do, so capturing good video and image data of these tasks is critical for the delivery of the PErforM workshops.

Tips for gathering video footage:

- Ensure the person using the video camera has an understanding of the manual tasks risk factors and the need to capture these risk factors on video.
- Ensure that the worker carrying out the task is videoed actually doing the task rather than a broad view of the work area.
- Ensure affected body parts are captured at the best angle for viewing the risk factors and subsequent assessment. For example, a task with bent positions in the back is best videoed from the side. If a task poses a significant risk to a specific body part, e.g. the hand and fingers, zoom in on the specific body part as well as capturing the whole body position.
- Ensure the person using the video camera has basic skills with videoing, i.e. zooming, minimising shaking and movement and lighting issues.
- Ensure enough detail of the task is captured on the footage and that the footage is long enough for the work team to analyse.
- Ensure the camera is easy to use and compatible for digital downloading onto a computer.
- If taking video footage of a range of tasks, ensure basic information about the tasks is obtained i.e. the work team that does the task, the task being done, date footage was taken, names of workers, etc.
- If the video footage is inserted in the PowerPoint presentation, ensure the presentation with video links is loaded on the hard drive of the laptop being used.
- Obtain image consents (if required) from workers. Organisations privacy requirements/obligations may vary.

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## Appendix 7: Site action plan

| Site Action Plan    |  |
|---------------------|--|
| Company:            |  |
| Site Champion Name: |  |

ACTION / TASK DUE DATE WHO DATE COMMENTS
COMPLETED

- 1. Site Champion attends PErforM train the trainer training.
- 2. Section/Area within business selected for implementation of PErforM.

Area chosen:

| ACTIC | ON / TASK   | DUE DATE | WHO | DATE<br>COMPLETED | COMMENTS                           |
|-------|---|----------|-----|-------------------|------------------------------------|
| 3.    | Employees/Work Group identified for work teams training.  |          |     |                   | Employees names: -                 |
|       |   |          |     |                   | -<br>-                             |
|       |   |          |     |                   | -<br>-<br>-                        |
|       |   |          |     |                   | -<br>-                             |
| 4.    | PErforM training <u>arranged &amp; scheduled</u> for selected work group employees  |          |     |                   | Date for Training:                 |
|       |   |          |     |                   | <u>Time</u> :                      |
|       |   |          |     |                   | <u>Venue:</u>                      |
| 5.    | Obtain video footage or photos of high risk manual tasks from selected work area (see   |          |     |                   | Task videos;  1.                   |
|       | Appendix 6, pg 25 of PErforM<br>Resource Manual for Workplace<br>Coordinators/trainers – Handy<br>Tips for taking video footage). |          |     |                   | <ol> <li>3.</li> <li>4.</li> </ol> |
|       |   |          |     |                   | ··                                 |

| ACTION / TASK  | DUE DATE | WHO | DATE<br>COMPLETED | COMMENTS          |
|--|----------|-----|-------------------|-------------------|
|  |          |     |                   | 5.                |
|  |          |     |                   | 6.                |
|  |          |     |                   |                   |
|  |          |     |                   |                   |
|  |          |     |                   |                   |
| <ol><li>PErforM training <u>conducted</u> for<br/>selected work group employees.</li></ol> |          |     |                   |                   |
| 7. Manual Tasks within chosen  |          |     |                   | Tasks identified: |
| Section/Area selected (initially) to undertake PErforM Risk                                |          |     |                   | 1.                |
| Assessments.   |          |     |                   | 2.                |
|  |          |     |                   | 3.                |
|  |          |     |                   | 4.                |
|  |          |     |                   | 5.                |
|  |          |     |                   | 6.                |
| 8. Task 1 – PErforM Risk   |          |     |                   | Task:             |
| Assessment conducted.  |          |     |                   |                   |
| <ol> <li>Task 2 – PErforM Risk<br/>Assessment <u>conducted.</u></li> </ol>                 |          |     |                   | Task:             |
|  |          |     |                   |                   |
| <ul> <li>Work on development, selection<br/>and implementation of controls for</li> </ul>  |          |     |                   |                   |
| Task 1   |          |     |                   |                   |
|  |          |     |                   |                   |

| ACTION / TASK  | DUE DATE | WHO | DATE<br>COMPLETED | COMMENTS     |
|--|----------|-----|-------------------|--------------|
| <ol> <li>Task 3 – PErforM Risk<br/>Assessment <u>conducted.</u></li> </ol>   |          |     |                   | Task:        |
| <ul> <li>Work on development, selection and implementation of controls Task</li> </ul>   |          |     |                   |              |
| <ol> <li>Task 4 – PErforM Risk<br/>Assessment <u>conducted.</u></li> </ol>   |          |     |                   | Task:        |
| <ul> <li>Work on development, selection and implementation of controls Task 3.</li> <li>12. Task 5 – PErforM Risk Assessment conducted.</li> </ul>           |          |     |                   | <u>Task:</u> |
| <ul> <li>Work on development, selection and implementation of controls Task 4.</li> </ul>  |          |     |                   |              |
| <ol> <li>Task 6 – PErforM Risk<br/>Assessment <u>conducted.</u></li> </ol>   |          |     |                   | Task:        |
| <ul> <li>Work on development, selection<br/>and implementation of controls for<br/>Tasks 5 &amp; 6.</li> <li>14. Evaluation / Feedback activities</li> </ul> |          |     |                   |              |
|  |          |     |                   |              |

## Appendix 8: PErforM Ergonomic Controls Risk Matrix

## **TASK**

| Manual Handling<br>Controls/<br>Recommendation<br>s | Anticipate<br>d Costs<br>High/Med<br>/Low | Anticipated<br>Timeframe<br>Short/Med<br>/Long | Practical<br>Implementati<br>on<br>Simple/Detail<br>ed<br>/Complex | Productivity<br>improvement<br>potential<br>High/Med<br>/Low<br>Comments | Potential safety<br>benefit<br>High/Med<br>/Low<br>Comments | Approved for<br>Implementatio<br>n<br>Yes/No | Date and<br>by<br>whom | Implemente<br>d<br>date | Checked<br>for<br>effectivene<br>ss and risk<br>reduction |
|---|---|--|--|--|---|--|------------------------|-------------------------|---|
| Elimination<br>Controls                             |   |  |  |  |   |  |                        |                         |   |
|   |   |  |  |  |   |  |                        |                         |   |
|   |   |  |  |  |   |  |                        |                         |   |
| Design Controls                                     |   |  |  |  |   |  |                        |                         |   |
|   |   |  |  |  |   |  |                        |                         |   |
| Administrative<br>Controls                          |   |  |  |  |   |  |                        |                         |   |
|   |   |  |  |  |   |  |                        |                         |   |
|   |   |  |  |  |   |  |                        |                         |   |

PErforM resource manual for workplace trainers PN10156. Last updated February 2012.

## Appendix 9: Benefits of participative ergonomics

## Participative ergonomics

Ergonomics is the study of the relationship between workers and their environment; it's about creating safe, healthy and productive 'people centred' environments. Participative ergonomics is about workers at all levels of an organisation working together to find solutions to ergonomics problems. This involves teaching workers and others—such as engineering and maintenance personnel—basic ergonomics principals. This allows them to draw on their own work experience to suggest solutions to work-related ergonomics problems.

Using a participative approach can have positive results for the business. Participation by workers, management and others is key to the success of this approach. Participative ergonomics enables organisations to identify and assess problems more effectively, as well as develop ideas about how to fix them. It also provides management with better information about ergonomics issues in their workplace.

#### What are the benefits of a participative ergonomics approach?

Participative ergonomics:

- is an internationally recognised approach
- is evidence based
- reduces injuries and workers compensation claims
- reduces absenteeism and improves productivity
- improves communication between workers and management
- results in better control of manual tasks risks.

#### What is the evidence?

There is an increasing body of research supporting the use of a participative ergonomics approach for the control of manual task risks. The research shows that this approach decreases manual tasks risks and reduces musculoskeletal injuries, workers' compensation claims and days lost to absence due to sickness. Please refer to the reference list below for supporting research articles.

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