

PErforM resource manual for workplace trainers

Guidelines for preparing and delivering the PErforM program



Contents

Introduction	3
Benefits to managing health and safety	3
Hazardous manual tasks and musculoskeletal disorders	3
PErforM resources	6
Process for implementing PErforM	7
Positive performance indicators	9
Negative performance indicators	9
Tips for the successful implementation of PErforM	10
Limitations of the PErforM program	11
Appendix 1: PErforM for work teams example workshop preparation guidelines	12
Tasks to complete	12
PErforM for work teams workshop plan	13
Appendix 2: PErforM Risk assessment tool	15
Worksheet 1: Manual tasks risk assessment form	15
Worksheet 2: Risk factor assessment	16
Appendix 3: Criteria for workplace PErforM champion	18
Appendix 4: Frequently asked questions	19
Appendix 5: Evaluation	25
Work teams PErforM workshops	25
Appendix 6: Handy tips for taking video footage	27
Appendix 7: Site action plan	28
Appendix 8: PErforM ergonomic controls implementation	34
Elimination Controls	34
Appendix 9: Benefits of participative ergonomics	36
Appendix 10: Worker discomfort survey	38
Appendix 11: PErforM business case template	39
PErforM business case	40

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Introduction

The Participative Ergonomics for Manual Tasks (PErforM) program is a simplified manual task risk management program that 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 <u>PErforM</u> <u>program</u>. 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. How do people access this information? Is it via a website? If so should this be listed?

Benefits of managing health and safety

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

- increase productivity so workers can work 'smarter rather than harder'
- increase quality as there may be fewer 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, health and wellbeing
- increase recruitment and retention as workers may be more selective about who
 they work for and 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.

Hazardous manual tasks and musculoskeletal disorders

Hazardous manual tasks are a significant issue for Queensland industry. Each year musculoskeletal disorders account for around 65% of non-fatal workers compensation claims. Of these, approximately two-thirds are a result of hazardous manual tasks. Most of these serious injuries could have been prevented.

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 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 (refer to **Appendix 9**, Benefits of Participative Ergonomics). 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 task 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
- assisting in meeting legislative requirements, specifically; hazardous manual tasks risk management, duty to consult and providing information and training to workers (<u>Work</u> <u>Health and Safety Act 2011</u>).

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 was successfully piloted in the manufacturing industry in 2009–10.

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 references 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 <u>resources</u> include:

- PErforM for management PowerPoint presentation, which provides managers with overview of the PErforM program including:
 - the benefits and elements of the program
 - the resources required
 - leadership and management support required.
- PErforM etool
- 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 training.
- PErforM for work teams PowerPoint presentation, which includes comprehensive notes
 pages to assist trainers to train work teams about the manual tasks to risk factors and
 in using the risk assessment tool.
- PErforM resource manual, which provides guidance on preparing for and delivering the program including evaluation.
- Participative Ergonomics for Manual Tasks handbook which includes:
 - information about manual tasks risk factors
 - the PErforM risk assessment tool
 - case studies.

The resources are avaiallbe on line? From your PErforM contact person?

Process for implementing PErforM

The following provides an overview of the proposed process to effectively implement PErforM at a workplace. This process can be modified to suit the organisation's needs. (Refer to **Appendix 7**, Site action plan)

WHSQ offers free PErforM Train the trainer workshops. You <u>can register for PErforM</u> workshops online at worksafe.qld.gov.au.

1. Obtain management commitment

- Introduce the program to management/leaders using the PErforM for management PowerPoint presentation.
- Secure management commitment. The success of PErforM is dependent on a
 commitment from managers and supervisors especially when there may be
 perceived competing priorities such as production and safety. (Refer to
 Appendix 11, 'PErforM Business Case Template', for a document that may
 assist in formalising endorsement from your management to implement PErforM
 in your workplace).

2. Planning

- Develop a plan for implementing the program. Elements to consider include:
 - communication about the program
 - a process for conducting ongoing risk assessments, obtaining approvals, implementing agreed controls and reviewing and monitoring. (Use **Appendix 8**, 'PErforM Ergonomic Controls Implementation').
 - embedding the program in workplace safety management systems
 - program evaluation.
- Consider piloting the program before implementing it across the organisation.
- Appoint a champion, a person to facilitate the PErforM program (see Appendix 3, Criteria for PErforM champions). A skilled and trained champion plays a critical role in promoting and driving the program.
- Appoint a trainer(s) 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.
- Identify work teams or a committee to undertake risk assessments and devise controls. 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 the 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.

- Determine appropriate hazardous manual tasks for teaching/learning risk assessment skills in the workshops. Having the work teams identify the hazardous manual tasks is part of the process. It can, however, be beneficial to have a few tasks already identified and videoed for the purposes of training. (Refer to Appendix 10, 'Worker Discomfort Survey', for a tool you could distribute for anonymous feedback to identify potential high-risk tasks. This could also assist in prioritising work areas and tasks for attention).
- Obtain video footage of tasks flagged for use in the work team skills training session (refer to Appendix 6, 'Handy tips for taking video footage').
- Prepare for training and workshop sessions (use **Appendix 1** PErforM for work team's workshop preparation guidelines).

3. Train workplace trainers

Workplace champion and trainer(s) are trained in delivering the PErforM risk management method to work teams.

4. Train work teams

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

- analysing video footage/observation of the chosen high-risk manual task(s)
- group discussion
- using the PErforM risk assessment tool to identify controls.

Work teams that have been identified in the implementation plan are trained in the PErforM risk assessment method by the nominated workplace trainer(s).

The teams training workshop should include some practice at performing a risk assessment on a problem workplace manual task using the PErforM risk assessment tool (refer to Appendix 2). Workplace video is particularly useful for this activity.

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 powerpoint slides are some ways that can assist in training people with low literacy levels or English as a second language.

There are different delivery options that might be used to conduct the training. It is important that the training is tailored to suit your work environment and those people who will be attending. Appendix 1 is an example of preparation for a training session; however, there are also resources available for delivering the training using a toolbox approach.

Refer to the <u>WHSQ website</u> for a copy of the toolbox version. The presentations are free for you to upload and tailor for your own organisations' needs.

5. Implementing controls

Once trained, work teams conduct risk assessments and devise controls.

Management considers the risk assessments and the proposed controls. Approved controls should be implemented and reviewed.

There is an <u>injury cost calculator</u> online (Worksafe.qld.gov.au) to assist in developing a business case for controls.

The work teams should be involved in monitoring, reviewing and reassessing tasks to ensure controls are effective.

Refer to the <u>WHSQ website</u> for case study and webinar examples where workplaces have made changes to systems and processes using the PErforM program.

An example of a 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.

6. Evaluation of the PErforM program

Evaluation of the PErforM program in the workplace is a necessary and valuable 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, and are used to measure how the system is working.

Workplace performance is indicated by the number of PPIs achieved. That is 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 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 from the implementation of PErforM in a variety of industries. Following these tips will assist in the successful implementation of PErforM in the workplace.

- 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 to help, such as an ergonomics consultant. In addition, engaging the assistance of an ergonomics professional to act as a resource and assist in implementing the PErforM program may improve the quality of the outcomes of the program.
- 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 in 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—and staff can focus on what can be done.

Limitations of the PErforM program

PErforM is a simplified manual task 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 specifically reference static postures. It is important that they are considered as part of the awkward postures risk factor assessment.
- 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 whether they are being exposed to similar risk
 factors throughout the shift despite performing different tasks.
- The PErforM tool does not provide an overall rating that will assist in prioritising tasks.
- The tool is not suitable for assessing people and animal handling activities. Refer to the *Manual tasks involving the handling of people Code of Practice.*'
- The tool is not recommended for assessing risks associated with computer use. Refer
 to <u>Ergonomic Guide to Computer Workstations</u> online (worksafe.qld.gov.au).

Appendix 1: PErforM for work teams example workshop preparation guidelines

Tasks to complete

4 weeks prior:

- Book training room, AV equipment (projector screen, laptop, data projector), whiteboard and catering. Ensure the 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 to PErforM for work teams PowerPoint presentation.

2 weeks prior:

Finalise timing for the 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 in pack	Item	How to prepare	No. required
1	Training session outline/program	One page.	
2	PowerPoint handout notes for trainers as well as the work	Three slides to a page	
	teams presentation (available from the PowerPoint presentation)	Double-sided and staple	
3	Participative Ergonomics for Manual Tasks handbook	Provided or photocopy double-sided and print in colour	
4	Two Blank PErforM risk assessment tool worksheets one	Double-sided	
	and two (Appendix 1)	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:	
7	Optional: <u>Sprains and strains</u> <u>prevention booklet</u>	www.worksafe.qld.gov.au Print from WHSQ website	
8	Optional post-workshop evaluation form (appendix 5)	www.worksafe.qld.gov.au 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 two hours for delivery of the work teams workshop (includes a 15-minute break)

Allow one 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						
01:00 before		set up a laptop and data projector—it's best to test the projector the day before as it is an essential part of the presentation						
start time		set up name tags and sign in sheet for attendees						
		set up refreshments, water and glasses for attendees.						
10min		Start time and opening						
		Welcome and introduce presenter/s and participants						
		Introduction to PErforM						
		sims of the session						
		workshop outline						
5min		background information about PErforM						
		how PErforM will be implemented in the organisation.						
		Manual tasks						
		definition of manual tasks						
10min		group discussion to identify manual tasks they perform						
	manual tasks related injuries.							
		Risk factors						
15min		Explanation of risk factors						
		Risk assessment						
5min		identify hazardous manual tasks						
		assess the risk.						
		PErforM risk assessment tool						
10min		Explanation of the PErforM risk assessment tool and worksheets.						
		Session break (10 min)						
		Practical						
15min		Risk assessment and case study.						
		Risk control						
10min		Explanation of the hierarchy of control and control options.						

Timing	✓	Activity				
		Practical				
25min		risk control suggestions and case study				
		monitor and review.				
		Evaluation and close				
		ensure post-workshop evaluation forms are filled out and collected				
5min		 explain what actions will be taken after the workshop to progress implementation of controls identified and future risk assessments 				
		thank participants.				
03:00		Finish				

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 Work	place	
Date:	Workplace:	
Risk assessors		
Work unit/team	:	
Positions:		
Names:		
Task descriptio	n	
Name of task:		
Why this task w	vas selected:	
Location where	task occurs:	
Who performs	the task:	
General descrip	otion:	
Postures:		
Forceful/muscu	llar exertions:	
Repetition and	duration:	
Tools or equipr	nent used:	
Work/task orga	nisation 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 is 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	low much force is	the person using? Th	nink about starting o	r stopping quickly	Body part
1	2	3	4	5	7
No effort		Moderate force & speed		Maximum force or speed	
Awkward p	oosture - How	awkward is the pers	son's posture?		
1	2	3	4	5	
All postures neutral		Moderately uncomfortable		Very uncomfortable	neck
Vibration-	How much are th	ne whole body or har	nd(s) being vibrated?	,	elbow back
1	2	3	4	5	back wrist/ hand
None		Moderate		Extreme	knee
Duration -		action performed for	?		low leg ankle/foot
1	2	3	4	5	Back
< 10 minutes	10-30 min	30 min – 1 hr	1 – 2 hrs	> 2 hrs	neck
Repetition	 How often are 	similar actions done	?		shoulder elbow back
1	2	3	4	5	low back
No		cycle time		cycle time	wrist/
repetition		< 30 s		< 10 s	hip/high
Risk cont	rols				low leg
Design contro	ol options:				Back
eliminate, su	ıbstitute, engi	neer)			

The State of	Queensland (De	epartment of	Employment	t and Industria	al Relations) (Octob
.007, University	of Queensland	d, Curtin Uni	versity of Tec	chnology		

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

What if a worker has a pre-existing condition?

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 there an uncontrolled risk?' Individual factors such as age and obesity are considered but they are not the first or only factors.

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.

Aren't we building a nation of softies by getting rid of the hard yakka?

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.

Is pre-employment screening a good way to stop sprains and strains?

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? 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.

Do back belts work?

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> (<u>www.worksafe.vic.gov.au</u>).

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> (<u>www.worksafe.vic.gov.au</u>).

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 working 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 the maintenance of good posture. Weights are usually increased over 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 workbenches 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 **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.

Should I get a consultant?

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.

Workers have been here for years (or doing the job the same way for years) 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.

Workers are not following procedures

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

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 of 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.

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.

Contractors and contracting out responsibilities

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 hope you enjoyed the workshop. Please take a few minutes to answer the questions. Your responses will assist us in developing future programs and let us know how we are doing.

Location of workshop:	Date:	
What is your job?		
About manual tasks:		
True (T) or False (F) (circle the correct answer)		
1. Weightlifting limits are not an effective way of	controlling hazardous manual task risk	T/ F
Teaching people how to lift safely is an effect risk	ive way to reduce hazardous manual task	T/ F
Design controls (e.g. changes to workstations your exposure to hazardous manual tasks risk	s, tools or equipment) eliminate or reduce	T/ F
4. Risk controls should focus on eliminating the	task or redesign	T/ F
5. 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		
2		
3.		
4.		
5.		
Please tell us what you thought about the workshop:		

		Strongly agree	Agree	Disagree	Strongly 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 hazardous manual task risk management				

12. Please rate yo	ur overall satisfa	ction with this worksho	p.	
☐ Very satisfied	Satisfied	☐ Neither satisfied	Dissatisfied	☐ Very dissatisfied
		nor dissatisfied		
13. What did the p	resenters do we	?		
14 . What can the բ	oresenters impro	ove?		

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 hazardous 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 with 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.

Appendix 7: Site action plan

Company:	 	
Site Champion Name:		

	n / Task	Due date	Who	Date completed	comments
1.	Site Champion attends PErforM train the trainer training.				
2.	Section/Area within business selected for implementation of PErforM.				Area chosen:
3.	Employees/Work Group identified for work teams training.				Employees names:
					-
					-
					-

Action / Task	Due date	Who	Date completed	comments
				-
				-
				-
				-
				-
				-
4 PErforM training arranged &				Date for Training:
 PErforM training <u>arranged & scheduled</u> for selected workgroup employees 				<u>Bate for Training</u> .
employees				
				<u>Time</u> :
				Vanue
				Venue:

	Obtain video footage or photos of high-risk manual tasks from selected work area (see Appendix 6, pg. 25 of PErforM Resource Manual for Workplace Coordinators/trainers – Handy Tips for taking video footage).	Due date	Who	Date completed	comments Task videos; 1. 2. 3. 4. 5. 6.
6.	PErforM training <u>conducted</u> for selected workgroup employees.				
7.	Hazardous manual tasks within chosen Section/Area selected (initially) to undertake PErforM Risk Assessments.				Tasks identified: 1. 2.

Action / Task	Due date	Who	Date completed	comments
				3.
				4.
				_
				5.
				6.
				0.
Task 1 – PErforM Risk				Task:
Assessment conducted.				
9. Task 2 – PErforM Risk				Task:
Assessment conducted.				
- Work on the development, selection				
and implementation of controls for				
Task 1				

Action / Task 10. Task 3 – PErforM Risk Assessment conducted.	Due date	Who	Date completed	<u>Comments</u> <u>Task:</u>
 Work on the development, selection and implementation of controls Task 11. Task 4 – PErforM Risk				<u>Task:</u>
 Work on the development, selection and implementation of controls Task 3. 12. Task 5 – PErforM Risk Assessment conducted. 				<u>Task:</u>
 Work on the development, selection and implementation of controls Task 4. 13. Task 6 – PErforM Risk Assessment conducted. 				<u>Task:</u>
 Work on the development, selection and implementation of controls for Tasks 5 & 6. 14. Evaluation / Feedback activities 				

Action / Task Due date Who Date completed comments

Appendix 8: PErforM ergonomic controls implementation

Controls/ recommended	Costs high/med /low	Timeframe short/med /long	Control implementation simple/Comple x	Potential productivit y improveme nt high/med /low comments	Potential safety benefit high/med /low comments	Approved for implementation yes/no	Date and by whom	Date implemented	Checked for effectiveness and risk reduction
Elimination controls									
Design controls									

Administrative controls					

Appendix 9: Benefits of 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, such as engineering and maintenance personnel basic ergonomic 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?

- it is an internationally recognised approach
- it 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.

References

- Halpern, C.A and Dawson, D.D. (1996). Design and implementation of a participatory ergonomics program for machine sewing tasks. International Journal of Industrial Ergonomics, 20, 429-440.
- Rivilis, I. et al. (2008). Effectiveness of participatory ergonomics interventions on health outcomes: A systematic review. Applied Ergonomics, 39, 342-358.
- Straker, L, Burgess-Limerick, R, Pollock, C, & Egeskov R. (2004). A randomised and controlled trial of a participative ergonomics intervention to reduce injuries associated with manual tasks: physical risk and legislative compliance. Ergonomics, 47.166-188.
- Vink, P.J et al. (2005). Making money with participatory ergonomics.
- Hendrick. H.W. (2003). Determining the cost-benefits of ergonomics projects and factors that lead to their success. Applied Ergonomics, 34, 419-427.

•	Lanoie, P. & Tavenas, S. (1996). Costs and benefits of preventing workplace accidents: the case of participatory ergonomics. Safety Sciences, 24, 181-196.



Appendix 10: Worker discomfort survey

Provide this survey to workers for individual completion or for working through in a group setting.

	Workplace name	
	Date	
1.	Which work tasks do you think are a problem i.e. the most likely to cause you or others in your team injury, the ones you hate doing?	Tasks:
2.	Do you suffer from swelling, numbness, tingling, pins and needles, stiffness aches and pains in any parts of your body? (circle) Yes / No Please show on the body diagram where you feel discomfort or pain What do you think caused the problem?	Rate the discomfort/pain on a scale of 1 to 5 1 2 34 5 slight moderate unbearable
3.	Do you have any improvement ideas that would reduce the risk of injury?	

The next step is to do a PErforM assessment on tasks identified above

Appendix 11: PErforM business case template

How to use the business case template

- 1. Review the *PErforM Resource Manual for Trainers* and other PErforM resources. Consider attending a PErforM Train the Trainer session.
- 2. Enter data and information relevant to your organisation in this business case template as indicated.
- 3. Present your business case to senior management for endorsement of recommendations so you can progress the implementation of the PErforM program. This document might be used in conjunction with the 'PErforM for Managers' PowerPoint.

Note: Use this template contents to cater for the individual needs of your organisation.

PErforM business case

Organisation << Insert organisation name>>

Date << Insert date>>

This business case identifies the legislative requirement outlined in the Workplace Health and Safety Regulation 2011; that << Insert organization name>> must manage the risks to health and safety relating to a musculoskeletal disorder associated with hazardous manual tasks.

It outlines proposed recommendations to establish an effective risk management approach using the Participative Ergonomics for Manual Tasks (PErforM) program.

The PErforM program is a simplified manual task risk management program which involves workplace-based teams devising manual tasks solutions for their high-risk manual tasks. PErforM is not only an effective way to manage hazardous manual tasks risks but also will assist << Insert organization name>> to meet our duty to consult as per the Work Health and Safety Act 2011.

Statement of need

- insert any relevant facts and figures specifically about the risks of hazardous manual tasks to workers in your organization. This might include your worker's compensation data; worker surveys (refer to <u>discomfort survey</u> in Appendix C in the Hazardous Manual tasks Code of Practice 2011), your risk register of identified hazardous manual tasks, observations and feedback from the workforce.
- refer to the <u>WHSQ statistics webpage</u> for statistics and industry reports that might help support you.
- provide an overview of the key costs to the organisation that may be impacted by not addressing the risks of musculoskeletal disorders resulting from hazardous manual tasks.

Draft text (may be deleted if not needed)

Hazardous manual tasks are a significant issue for Queensland industry. Each year musculoskeletal disorders account for around 65% of non-fatal workers compensation claims, of these, approximately two-thirds are a result of hazardous manual tasks. Most of these serious injuries could have been prevented.

Hazardous manual tasks can contribute to a number of musculoskeletal injuries including:

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

Musculoskeletal injuries can result in permanent injuries that can have a significant impact on a person's working ability and quality of life, as well as impacting on our organisations' productivity and economic performance of the company.

These individuals are more likely to take more sick leaves, have more injuries, stay off work longer and have higher workers compensations costs.

Relationship to organisational vision and strategy

Provide an overview of how addressing health and safety for workers relates to the vision, mission, business plan, policies or other strategic documents of the organisation.

Outline any links with other initiatives or services, core and current activities.

<u>Draft text (may be deleted if not needed):</u>

Expected benefits

The expected benefits outlined in this section should reflect the program drivers identified above under 'statement of need'. It is important to be clear about the timeframes required to achieve the stated benefits.

<u>Draft text (delete any points that are not relevant):</u>

The benefits expected from the implementation of PErforM in our workplace and the associated timeframes to achieve those benefits are:

Within a few months:

- improved awareness of the hazardous manual tasks risk factors amongst workers
- improved worker engagement
- identification of effective controls that will target the key injury risk factors and be designed for the work requirements to suit the workers
- a greater sense of ownership and commitment to using the controls once they are implemented.

Within one to two years:

- improved productivity
- indirect cost savings (job satisfaction, skills retention)
- ownership of controls
- improved safety culture

Within two to three years:

- reduced absenteeism
- reduced workplace injuries

reduced workers' compensation costs

The draft text below providing evidence from Australian and international research on the benefits of participative ergonomics initiatives may be used where relevant to support your case.

Draft text (may be deleted if not needed or relevant):

The PErforM program is based on a participative ergonomics approach which is an internationally recommended approach for reducing musculoskeletal disorders. The premise 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/ toolbox talks to generate control ideas.

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

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.

Proposed recommendations

It is recommended that <<executive management >> endorse the following key steps required to implement the PErforM program:

<<insert next steps>>

Examples may include:

The Safety/ operations team will:

- identify PErforM champions to project manage the PErforM implementation
- identify work teams or a committee (approximately 8–10 people ideally) to participate in the PErforM training/pilot
- video examples of hazardous manual tasks to use in training
- develop an action plan and communication plan for management endorsement
- conduct PErforM training and conduct risk assessments including a protocol for conducting ongoing risk assessments and reviews.

dorsed by	Date	
nt name		