

GOVERNMENT OF WESTERN AUSTRALIA

**Lunchtime 4Thought Session – 10 June 2011**  
**“Manual Tasks in Supermarkets” Project**

**Christina Paterson**  
 Senior Scientific Officer/Inspector  
 Human Factors & Ergonomics Team

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**Session overview**

- Manual Tasks: definition & background
- Statistics
- Project details
- Project outcomes
- Opportunities for improvement
- Examples of best practice
- Legislation
- Questions

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**Definition: Manual Tasks**

- **Manual tasks** refer to any activity that requires a person to use their physical body (musculoskeletal system) to perform work including:
  - manual handling (the use of force in lifting, lowering, pushing, pulling, carrying or otherwise moving, holding or restraining any person, animal or thing);
  - performing repetitive actions;
  - adopting awkward or sustained postures; and
  - using plant, tools or equipment that exposes workers to vibration.

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**What makes manual tasks hazardous?**

Risk of injury increases when:

- The body is using awkward postures, rather than preferred neutral postures
- Muscles are involved in static work (staying in one position – eg prolonged standing) or in highly repetitive movements
- The body is exposed to high/intense (one-off), cumulative (ongoing) or unexpected forces

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**Where does the risk come from?**

The “conditions” that create the risk include:

- Work area design and layout
- Nature of the item, equipment or tool
- The nature of the load
- The working environment
- Systems of work, work organisation and work practices

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**Statistics – WA, Across all industries**  
 (2008-2009 most recent available stats)

- 17 786 lost time injuries (1+ days off work) per year
- More than 6600 of these were from manual tasks (“body stressing”)
- Sprain and strain type injuries account for 48.3% of all work related injuries
- Average duration of body stressing LTIs: >80 days off work (2<sup>nd</sup> only to mental stress, [>110 days])
- Over last 5 years, supermarkets & grocery stores had more lost time injuries than any other industry in WA (> 5100 LTIs)

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## Statistics – WA Supermarkets

(2008-2009 most recent available stats)

- For the last 5 years, supermarkets averaged 290 LTIs (1+ days) from manual tasks (“body stressing”)per year
- Average time off work per claim from manual tasks has shown a general increase (48 days lost in 2004-2005, climbing to 70 days lost in 2007-2008= 146% increase)
- The numbers of “severe” injuries (more than 60 days lost time) from manual tasks has increased dramatically over last 5 years (34 LTIs to 108 LTIs = 318% increase)
- Most common mechanism of body stressing injuries is “muscular stress while lifting”



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## Project Details

- Who: 21 Supermarkets – both large and small business, 7 Inspectors
- What: Proactive inspection, manual task focus
- Where: 8 Regional, 13 Metropolitan
- When: February to May 2011
- How:
  1. Consultation with stakeholders
  2. Development of checklist, pilot inspection
  3. Preparation of information resource kits
  4. Appointments made in advance for inspections
  5. Inspections completed, enforcement where necessary, feedback provided, industry seminar
- Why: High risk hazard, high risk industry (stats-based)

## Project Outcomes

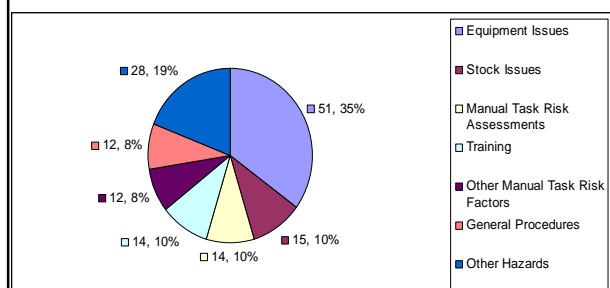
Enforcement Type	Number
Prohibition Notice	0
Improvement Notice	56
Verbal Direction/ Verbal or Written Advice	90
<b>TOTAL</b>	<b>146</b>
<i>Average enforcement issues per inspection (146/ 21)</i>	6.95



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## Enforcement by Hazard Type



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## Opportunities for Improvement



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## Equipment Issues

- Trolleys
- Ladders
- Safe Steps
- Pallet jacks, walkie stackers, wheelie bin lifters, pallet stands
- Shelving
- Equipment manuals/ information/ procedures
- Equipment condition, maintenance & repairs



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## Equipment examples



Unsafe ladders & safe steps



## Stock Issues

- Stock at height
- Stock over crowding/ congestion in storage areas
- Stock or manual tasks requiring excessive reach

## Stock examples



## Manual Task Risk Assessments

- General – ID hazards, assess risks, make changes
- Equipment numbers and storage locations – is there enough, and where are they stored? Does storage location encourage or discourage use?
- Stock locations (height, depth, heaviest items, most common items, double handling)

## Risk Assessment Information

Code of practice  
Manual tasks  
2010

Five steps to risk assessment

Challenging task	Manual task (No. 1)
Date of assessment:	Assessor's name:
Task details to consider:	Level of risk:
<p>How likely is the task to be done in the normal course of work?</p> <p>Frequency of task or task handling</p> <p>Duration of task or task handling</p> <p>Force exerted or load lifted or pushed</p> <p>Posture (e.g. twisting, bending, reaching)</p> <p>Speed of task or task handling</p> <p>Time pressure</p> <p>Repetitive nature of task or task handling</p> <p>Task design (e.g. awkward postures)</p>	<p>Source of risk:</p> <p>Physical (e.g. weight, height, distance, speed, force, vibration, noise, temperature, humidity, air quality, lighting, etc.)</p> <p>Organisational (e.g. time pressure, task design, etc.)</p> <p>Human (e.g. fatigue, stress, etc.)</p>
<p>Assessor's preparation:</p> <p>Did the assessor prepare via training?</p> <p>Did the assessor have a copy of the Code of Practice?</p> <p>Did the assessor have a copy of the Manual Task Risk Assessment Manual?</p> <p>Did the assessor have a copy of the Manual Task Risk Assessment Manual?</p> <p>Did the assessor have a copy of the Manual Task Risk Assessment Manual?</p> <p>Did the assessor have a copy of the Manual Task Risk Assessment Manual?</p> <p>Did the assessor have a copy of the Manual Task Risk Assessment Manual?</p> <p>Did the assessor have a copy of the Manual Task Risk Assessment Manual?</p> <p>Did the assessor have a copy of the Manual Task Risk Assessment Manual?</p> <p>Did the assessor have a copy of the Manual Task Risk Assessment Manual?</p>	<p>Overall risk:</p> <p>Low</p> <p>Medium</p> <p>High</p> <p>Critical</p>

## Training in Manual Tasks

- Not done
- Not refreshed
- Inadequate
- Not aligned with Code of Practice: Manual Tasks (2010)

## Training examples

**7 Steps to Safe Lifting**

- Check**
- Get Ready**
- Assess the Position**
- Use the Feet**
- Get Up**
- Get Strong**
- Get the Object Down**

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Code of practice  
**Manual tasks**  
2010

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## Other manual task risk factors

- Reach
- Weight
- Double handling
- Seating
- Task rotation

## Other manual task risk factor examples

Task Rotation

Reach – high, low, forward

Seating

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## General Procedures

Schedule 2 – Forms relating to general procedures  
Injury Notification Form

- Injury Notifications to WorkSafe
- Consultation on Safety
  - Hazard reporting
  - Communication

Sample Chart for Reporting Hazards on Noticeboard

Date	Hazard	Location	Suggested Action	Who will follow up	Action taken	Completion Date

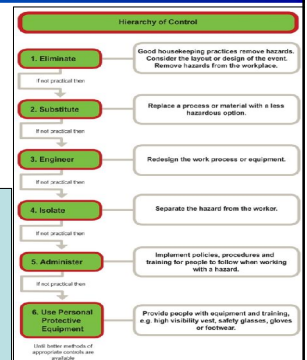
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## Best Practice in Manual Tasks

## Best Practice in Manual Tasks

Using “Best Practice” in Manual Tasks involves applying the *Hierarchy of Controls*

**HIGH level controls to eliminate or reduce risk are better than LOW level controls such as training, “safe work procedures” or job rotation**



## Hierarchy of Controls for Manual Tasks

### 1. ELIMINATE THE HAZARD OR HAZARDOUS WORK PRACTICE

### 2. REDESIGN, MODIFY, ALTER OR SUBSTITUTE

- Work area and layout
- Nature of items, equipment and tools
- Nature of the load
- Work environment
- Systems of work, work organisation and work practices

### 3. APPLY ADMINISTRATIVE CONTROLS

- Provide information, training and supervision
- Develop and enforce policies and procedures

## Best Practice: Equipment



## Best Practice: Equipment cont'd..

Pallet stands, turn tables, lifters and tilt tables



## Best Practice: Stock

Clear ridge capping

Dolly-trolleys to improve cool room stock access & mobility

## Best Practice: Training

1. Risk management (Theory)
2. Task Specific (Practical)
3. Use Case Studies for problem-solving (Both)

- When
- Who
- Elements of training



## Best Practice: Reaching

Front opening deli cabinets for cleaning & loading tasks



## Best Practice: Double Handling



Modular fresh produce displays – crates direct from the supplier



Rear loading, gravity feed dairy fridge

## Best Practice: Manual stock movement



Roller system in meat department – eliminates carrying and reduces push/ pull forces



Upright fridge cabinets (and bakers' ovens) with continuous level floor surface allows stock to remain on trolleys and reduces resistance when pushing/ pulling

## Legislation for Manual Tasks

### OSH ACT 1984

S19 Duties of Employer

S20 Duties of Employees

S23I Notification of injuries

S23K Investigation of hazard/ injury

#### General Duties:

-Safe work, equipment, environment

-Training and supervision

-Consultation on safety matters

-Provide PPE

### OSH REGULATIONS 1996

3.1 & 3.4 - Risk assessment & manual handling risk assessment

3.6 & 3.7 – Movement within and to/from workplaces

3.13 – Lighting

3.14 – Work space generally

3.15 – Air temperature

3.17(1)(a) – Cleanliness and removal of debris

3.18 – Floor surfaces

3.19 – Seating

3.34 – Personal protective equipment

## Questions?

Further information:

- [www.worksafe.wa.gov.au](http://www.worksafe.wa.gov.au) (see section on “Manual Tasks”)
- Manual Tasks Code of Practice (2010)
- Free Manual Tasks training package
- ThinkSafe Small Business Assistance Programme