Introduction to Ergonomics in the Workplace

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Webinar Presenters

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Pam Knobel
Principal Advisor Ergonomics. Pam has worked for WHSQ for 11 years including as a Small Business Advisor. Pam has qualifications in Occupational Health and Safety and Ergonomics. Pam has also worked as a Rehabilitation Coordinator with several state government departments. Pam currently works with the Transport portfolio.
Overview of webinar

• What is ergonomics and who is an ergonomist?

• The benefits of applying ergonomic principles in the workplace

• Workplace Health and Safety Queensland (WHSQ) resources which can assist
Definitions

What is ergonomics?

Source: International Ergonomics Association
www.iea.cc
Key areas of ergonomics

• Physical
• Cognitive
• Organisational
Physical ergonomics

- posture
- forces acting on the body
- environmental factors (e.g., light)
- temperature
- vibration
Physical ergonomics
Cognitive ergonomics

- mental processes
- perception
- human computer interaction
- mental workload
- decision making
Cognitive ergonomics

Air Traffic Control Tower
Source: https://farm8.staticflickr.com/7139/7562313022_6f8d4de58c_z.jpg
Organisational ergonomics

- communication
- teamwork
- work design
- participation
- shift work
- fatigue
Organisational ergonomics

Source: https://commons.wikimedia.org/wiki/File:Truckdriver.jpg
Impact on the worker

Look at this video for example....

NB: there is no audio
Fields associated with ergonomics

- Physiology
- Psychology
- OHS
- Industrial Design
- Occupational Therapy
- Management
- Engineering
- Medicine
- Physiotherapy
- Industrial Relations
- Architecture
Ergonomists

HFESA
Human Factors & Ergonomics Society of Australia inc.

www.ergonomics.org.au

International Ergonomics Association

www.iea.cc
Participatory ergonomics

Q1. Who has heard of participatory ergonomics?
   a) Yes
   b) No

Q2. Who knows what it means?
    Insert your comment...
Where does ergonomics fit in injury prevention?
Ergonomics and safety management systems

- Integrated into safety management systems
- Risk management
- Consult workers
- Suitable for your workplace
Ergonomic controls

Source:
http://blog.readytomanage.com/what-is-a-good-problem-solving-assessment/
Benefits of ergonomics


- Improved communication and job control (Rivilis et al 2006; Evanorff et al 1999, Carrivicck et al 2007)
Case study: Local Council

• Implemented an ergonomics intervention
• How?
  – Surveyed workers to identify problem manual tasks
  – Workers with ergonomics training assessed identified tasks
  – Workers developed controls
  – Management commitment
Splitting truck side gate to access toolbox
City cleaning – town bin replacement

Across the City there were approximately 700 town garbage bins weighting 60L to 80L when full, sprain and strain injuries as a result of lifting, carrying and emptying these bins manually.

Action – to provide a larger capacity bin that can be wheeled and mechanically lifted into the truck. The larger bins (240L wheelie bin) can be aesthetically improved for streetscape areas by placing inside a housing (enclosure / guardian). The larger bins require once daily servicing in the busier areas instead of the usual 3 or 4 times a day. Lost time shifts reduced from 184 in 2012 to 6 in 2013 (after implementation).
WHSQ resources

Summary
Questions
Resources

• Sign up for free eNEWS email subscription service

• Visit www.worksafe.qld.gov.au
  – Resources
  – Webinar Videos
  – Safe Work Month Events
Rehabilitation and Return to Work Coordinator Community

Like Us On Facebook

www.facebook.com/RRTWCommunity
Work safe. Home safe.

Work safe for the moments that matter
Work Health and Wellbeing Professional Development Workshops

Interested in learning how to improve injury management and workers compensation performance through workplace health and wellbeing?

<table>
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<th>Workshops will be held in the following locations from June to September 2015:</th>
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<tr>
<td>Brisbane CBD</td>
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<td>Bundaberg</td>
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<td>Chinchilla</td>
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<td>Gladstone</td>
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To register, go to [www.worksafe.qld.gov.au](http://www.worksafe.qld.gov.au) or phone 1300 362 128 or email [healthyworkers@justice.qld.gov.au](mailto:healthyworkers@justice.qld.gov.au)