

Webinar series

Introduction to Ergonomics in the Workplace

Presenters:

Pam Knobel

Michelle James

Webinar Presenters



Michelle James

Principal Advisor Ergonomics. Michelle has worked for WHSQ for the last 18 years including as an Ergonomics Inspector. Michelle has qualifications in Occupational Health and Safety and Ergonomics. Michelle coordinates the WHSQ PErforM program.



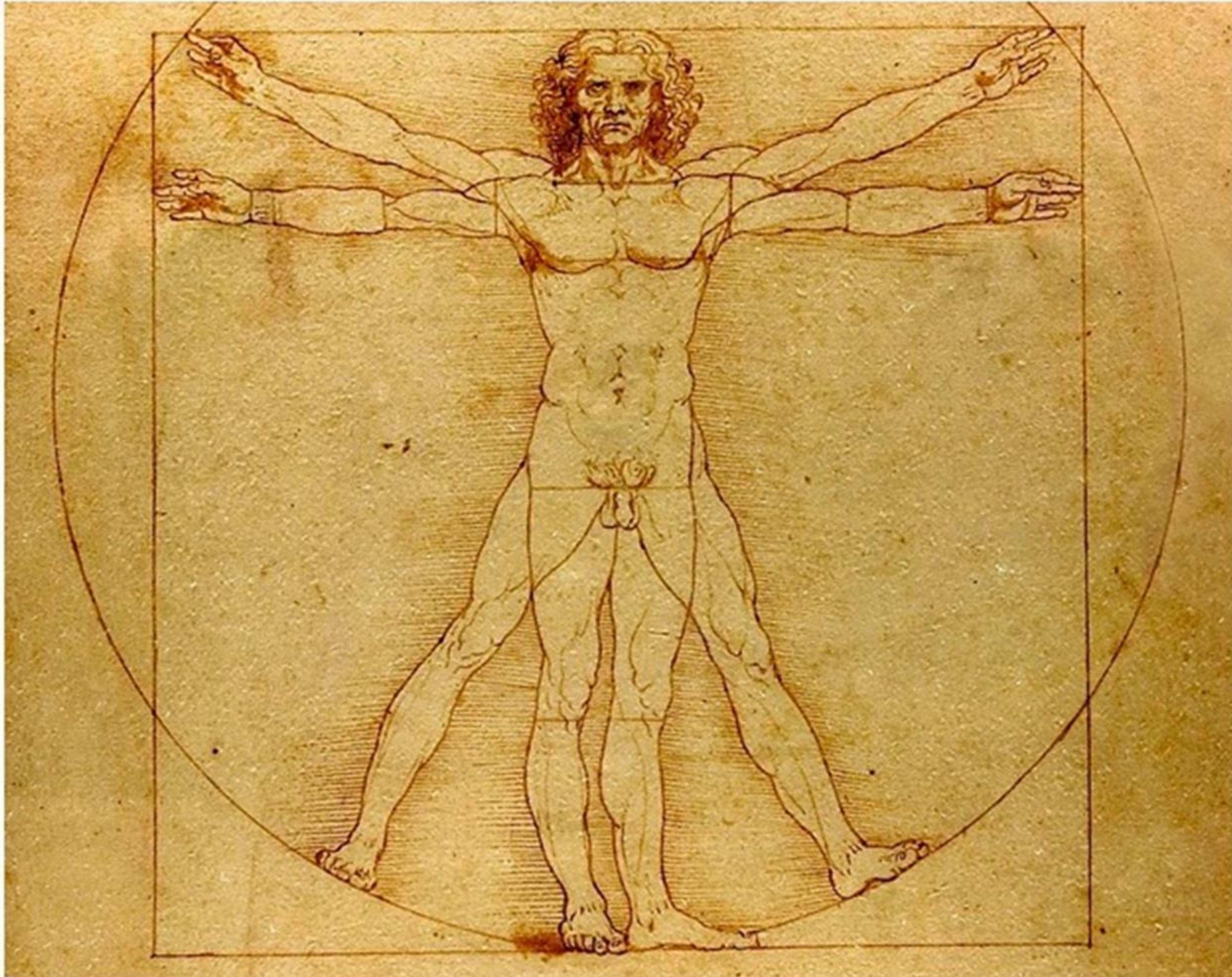
Pam Knobel

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



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

Architecture

Industrial
Relations

Ergonomists



www.ergonomics.org.au



www.iea.cc

Participatory ergonomics

Q1. Who has heard of participatory ergonomics?

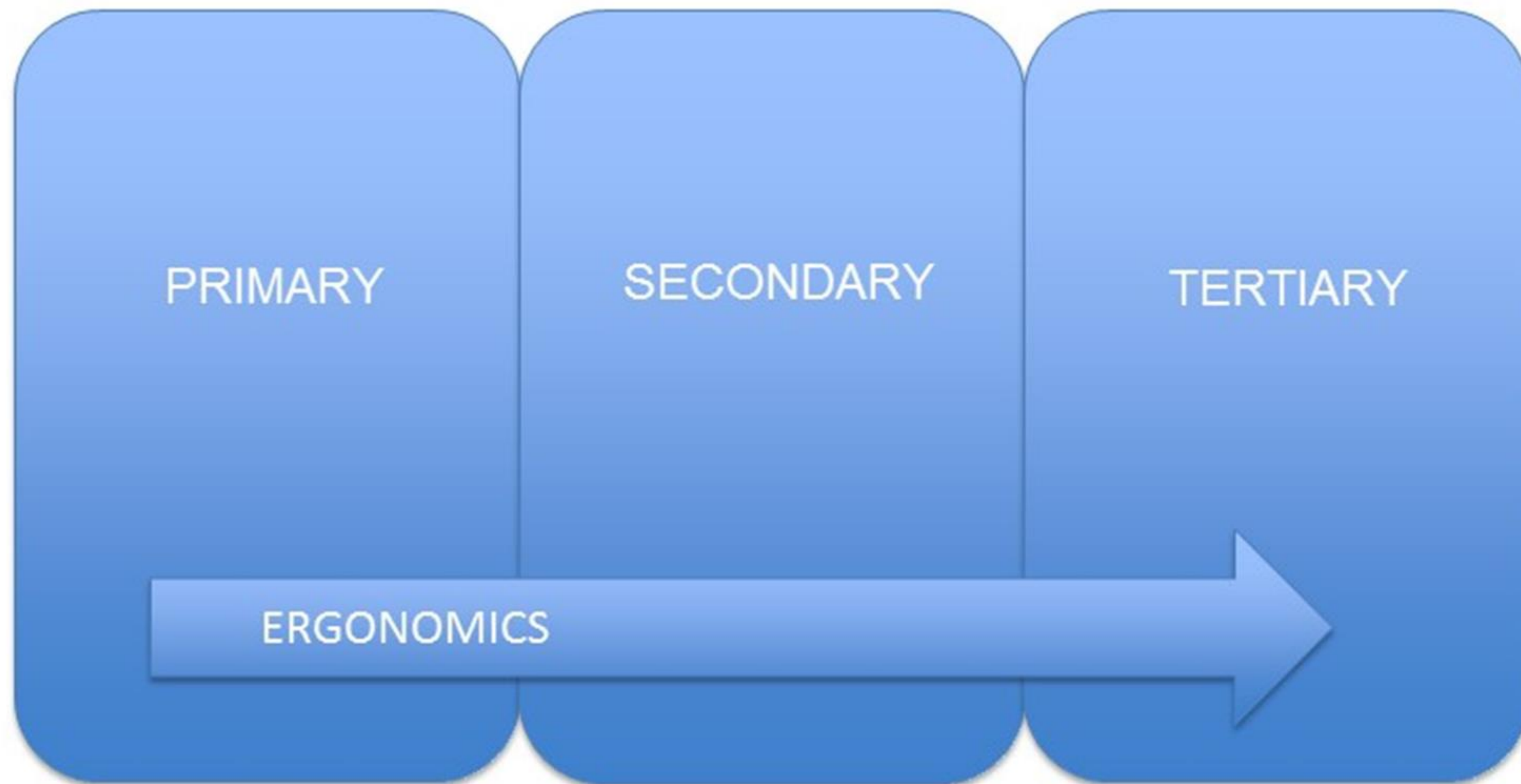
a) Yes

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

- **Increased productivity** (*Goggins et al 2008, Abrahamsson L 2000; Martimo K_P et al 2010; L Hendrick 1996, 2001; Vink et al 2006*)
- **Decreased injury costs** (*Tompa et al 2009; Evanorff et al 1999, Lanoie P et al 1996 Carrivicck et al 2007*)
- **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

<https://www.worksafe.qld.gov.au/>



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Work safe for the *moments that matter*

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Our industry sites feature tailored information relevant to your industry.

Safety topics

Key safety topics for your home and workplace.

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Change customer type >

Quick links

- Notify of an incident
- Make a WorkCover claim
- Renew my policy/pay my premium
- View my certificate of currency (WorkCover)
- Codes of practice
- Ask WHS/ESO a question
- Submit information to WorkCover
- Who do I cover for workers' compensation?

News

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Summary



Questions

Resources

- Sign up for free eNEWS email subscription service
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Rehabilitation and Return to Work Coordinator Community

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www.facebook.com/RRTWCnetwork/

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?

Workshops will be held in the following locations from June to September 2015:

Brisbane CBD	Gold Coast	Mackay	Rockhampton
Bundaberg	Gympie	Maryborough	Sunshine Coast
Cairns	Ipswich	Moranbah	Toowoomba
Chinchilla	Logan	Mt Isa	Townsville
Gladstone	Longreach	Roma	Virginia

To register, go to www.worksafe.qld.gov.au or phone 1300 362 128 or email healthyworkers@justice.qld.gov.au