Good work design in musculoskeletal injury prevention and return to work

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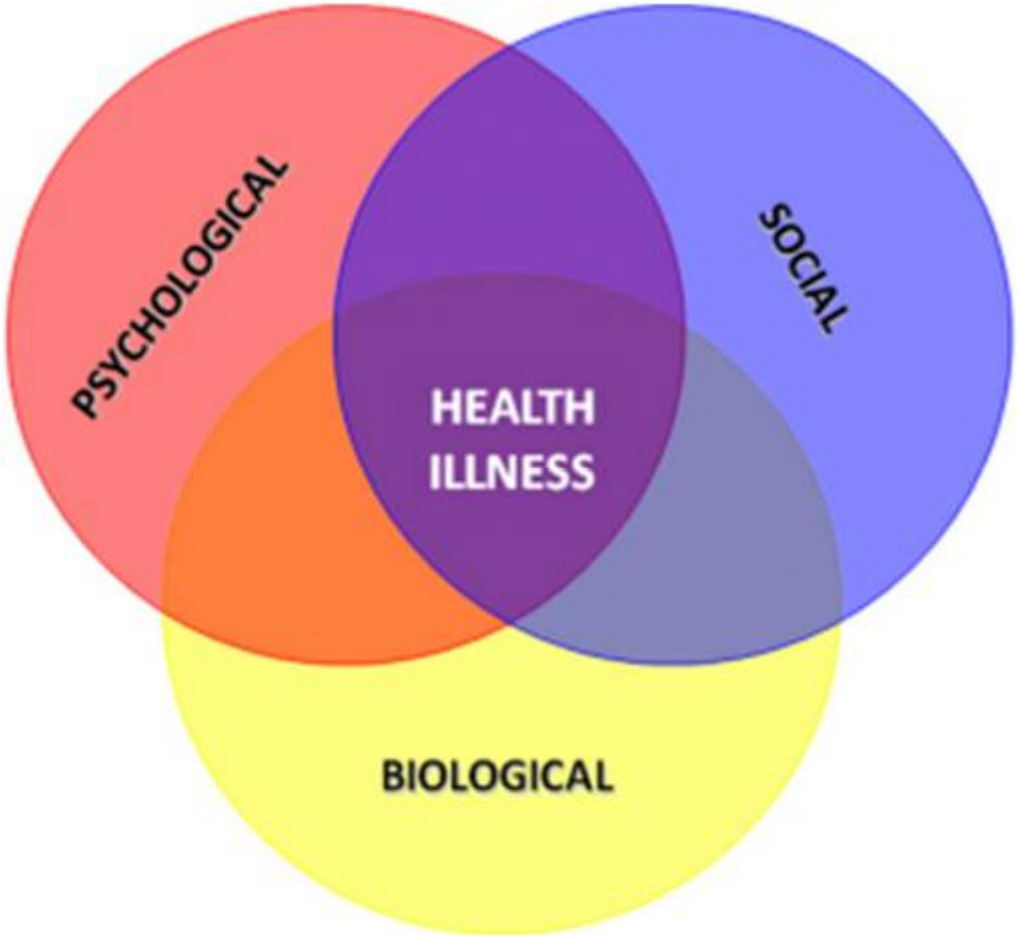
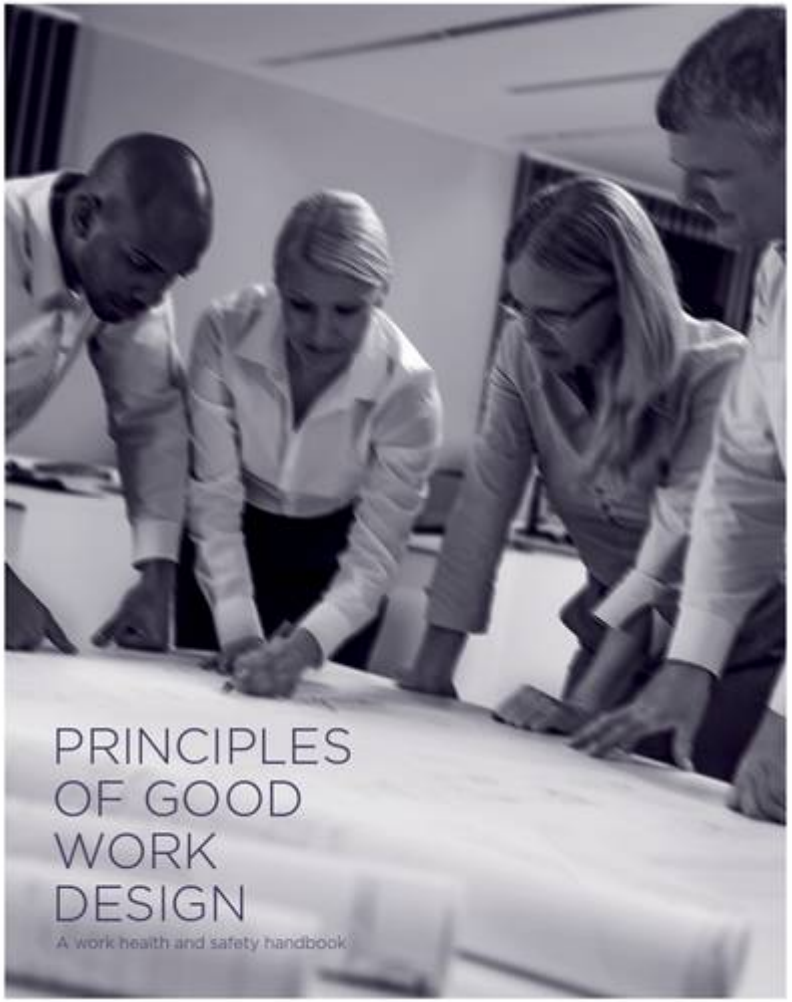
Back on Track
Injury Prevention & Management



Biopsychosocial model of health

What is good work design?



Principles of Good work Design

Safe Work Australia

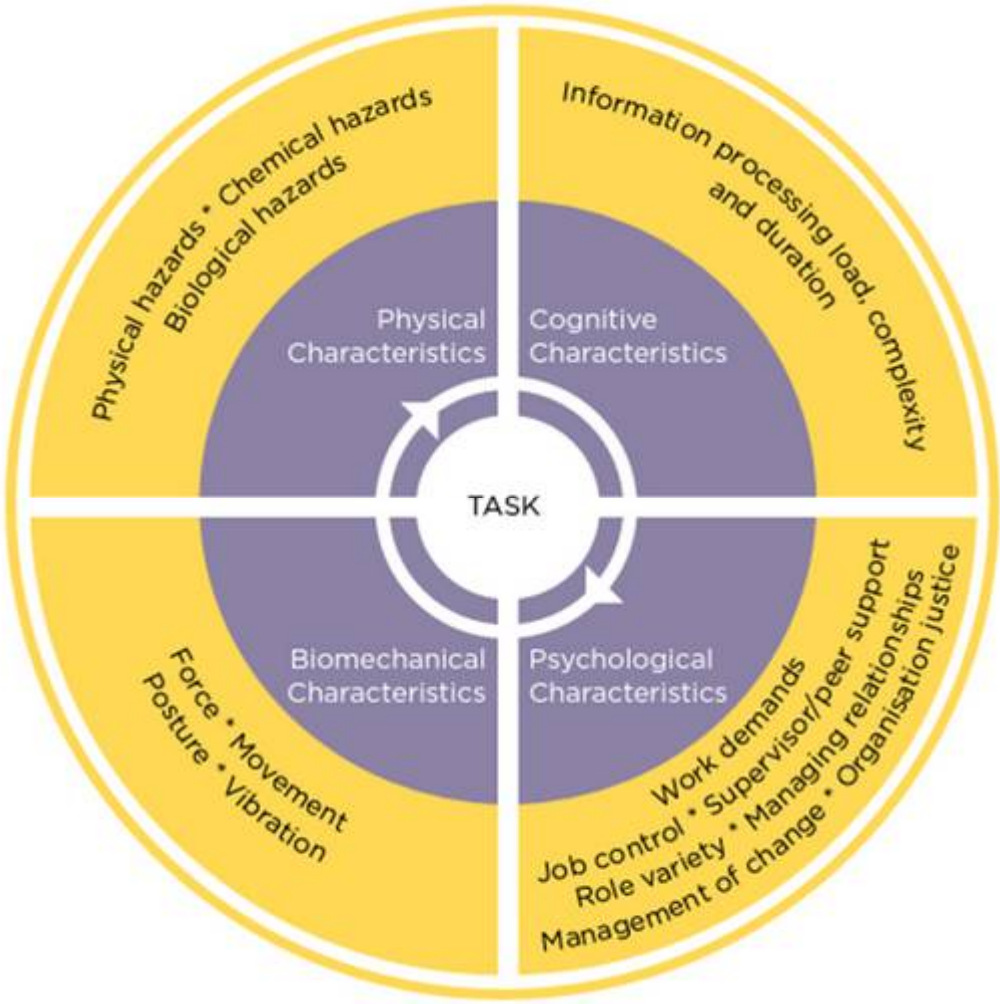
‘Good work’ defined as…

Healthy and safe work where the hazards and risks are eliminated or minimised so far as is reasonably practicable.

Good work is also where the work design optimises human performance, job satisfaction and productivity.

Principles of good work design

www.safeworkaustralia.gov.au



- Sustained and/or repeated force
- High or sudden force
- Sustained and/or repeated awkward posture
- Repetitive movement
- Vibration

Managing the risk of psychosocial hazards at work

Code of Practice

2022

WHSQ
Workplace Health and Safety Queensland
worksafe.qld.gov.au

Queensland Government

Psychosocial hazards

High or low job demands

Low job control

Poor support

Low role clarity

Poor organisational change management

Low reward and recognition

Poor organisational justice

Poor workplace relationships

Interpersonal conflict

Remote or isolated work

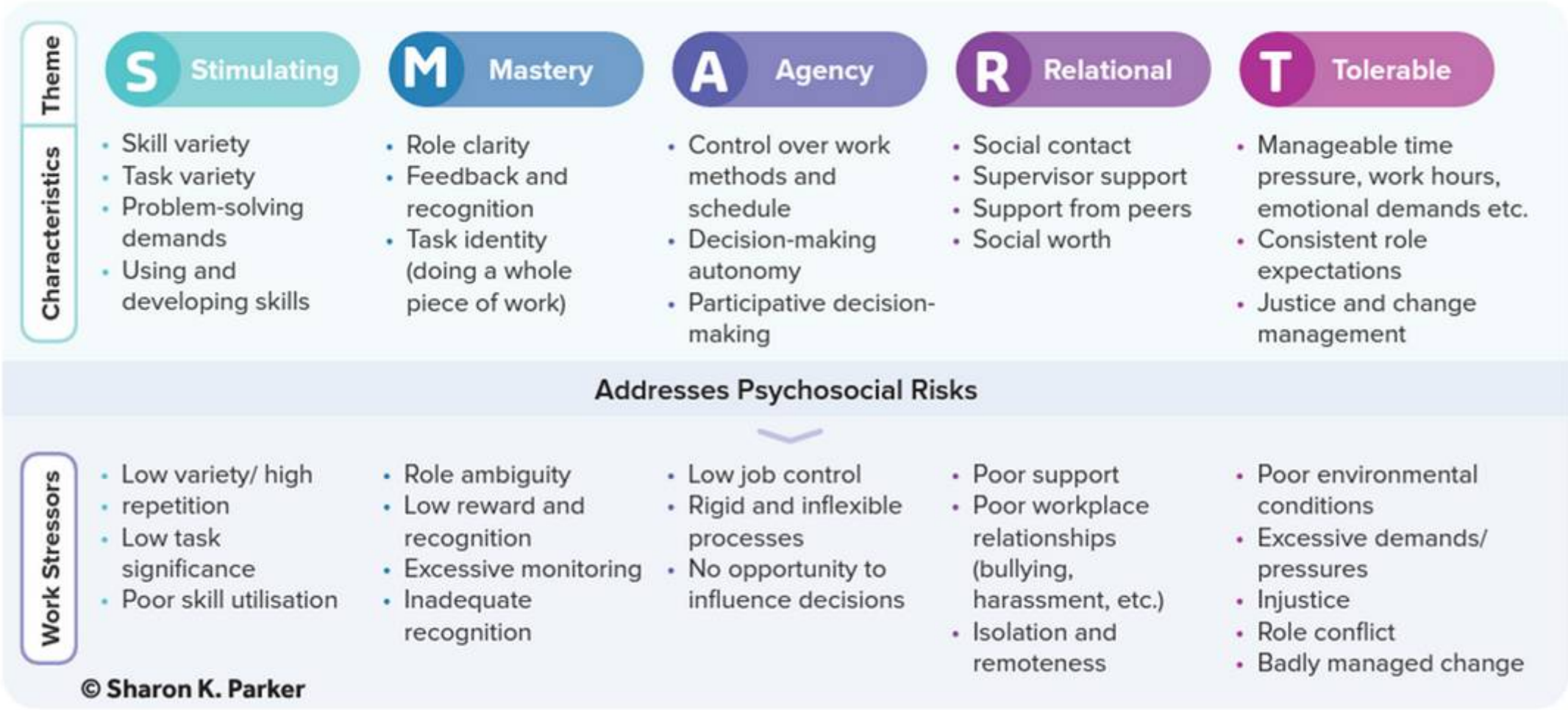
Poor environmental conditions

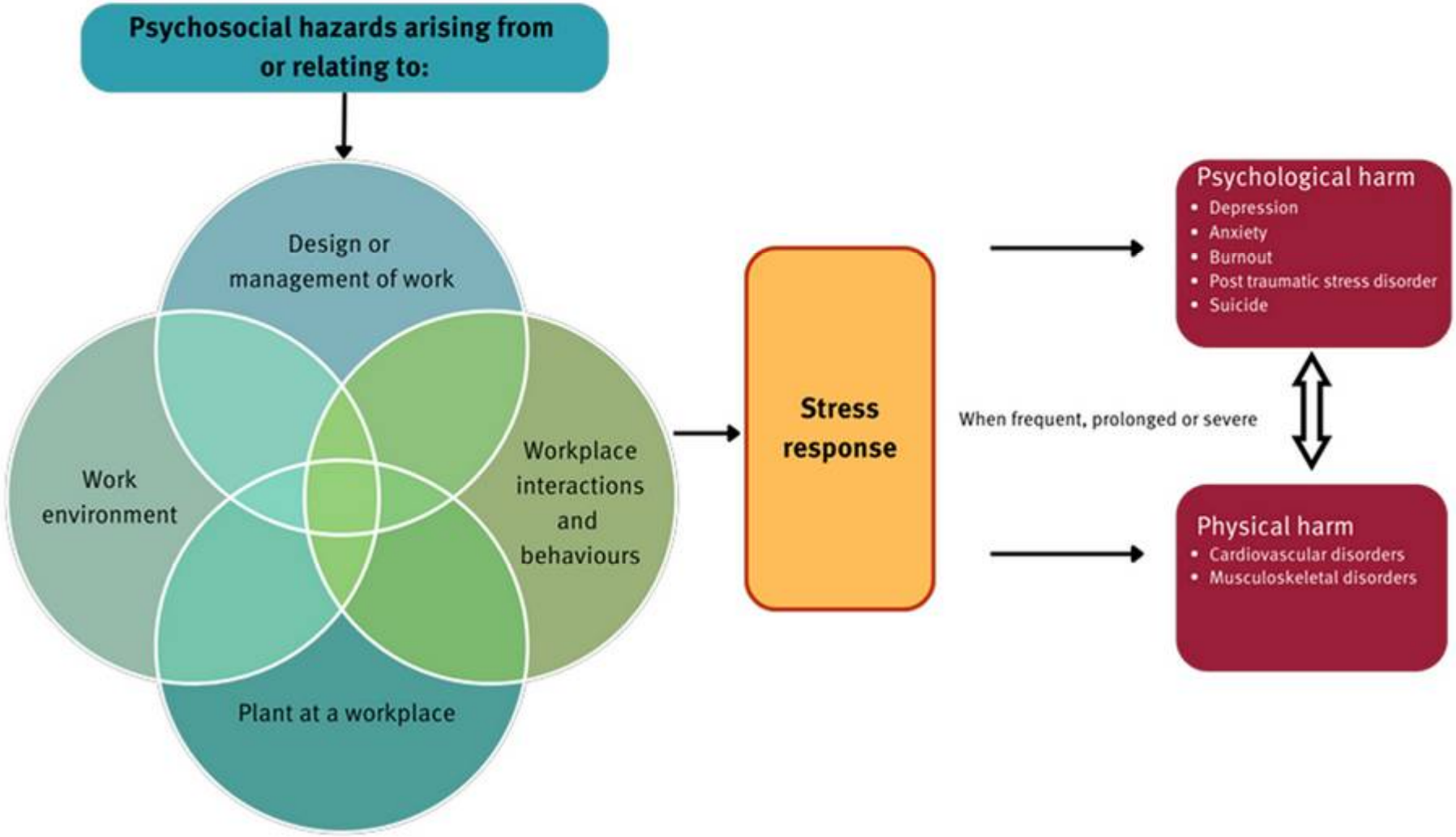
Traumatic events

Violence and aggression

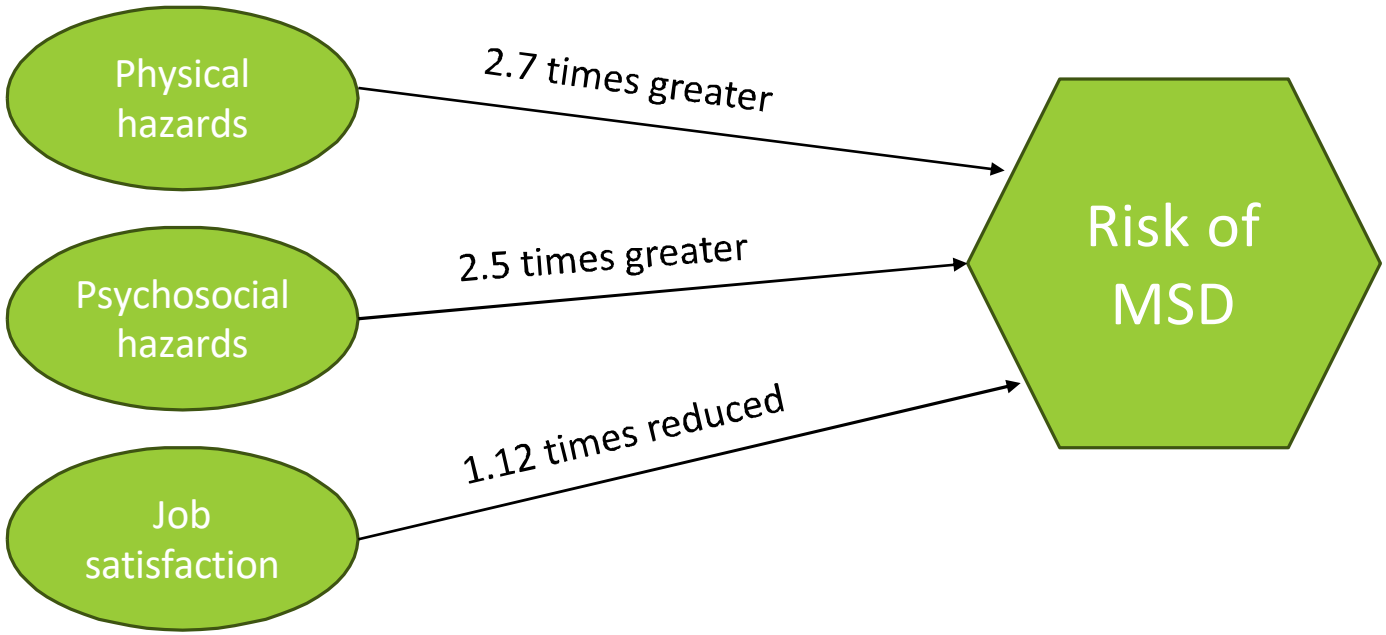
Bullying

Harassment


Theme
Characteristics
S Stimulating
M Mastery
A Agency
R Relational
T Tolerable
• Skill variety
• Task variety
• Problem-solving demands
• Using and developing skills
• Role clarity
• Feedback and recognition
• Task identity (doing a whole piece of work)
• Control over work methods and schedule
• Decision-making autonomy
• Participative decision-making
• Social contact
• Supervisor support
• Support from peers
• Social worth
• Manageable time pressure, work hours, emotional demands etc.
• Consistent role expectations
• Justice and change management
Addresses Psychosocial Risks
Work Stressors
• Low variety/ high repetition
• Low task significance
• Poor skill utilisation
• Role ambiguity
• Low reward and recognition
• Excessive monitoring
• Inadequate recognition
• Low job control
• Rigid and inflexible processes
• No opportunity to influence decisions
• Poor support
• Poor workplace relationships (bullying, harassment, etc.)
• Isolation and remoteness
• Poor environmental conditions
• Excessive demands/ pressures
• Injustice
• Role conflict
• Badly managed change
© Sharon K. Parker


Psychosocial hazards arising from or relating to:
Design or management of work
Work environment
Workplace interactions and behaviours
Plant at a workplace
Stress response
When frequent, prolonged or severe
Psychological harm
Depression
Anxiety
Burnout
Post traumatic stress disorder
Suicide
Physical harm
Cardiovascular disorders
Musculoskeletal disorders

Relative contribution to MSDs

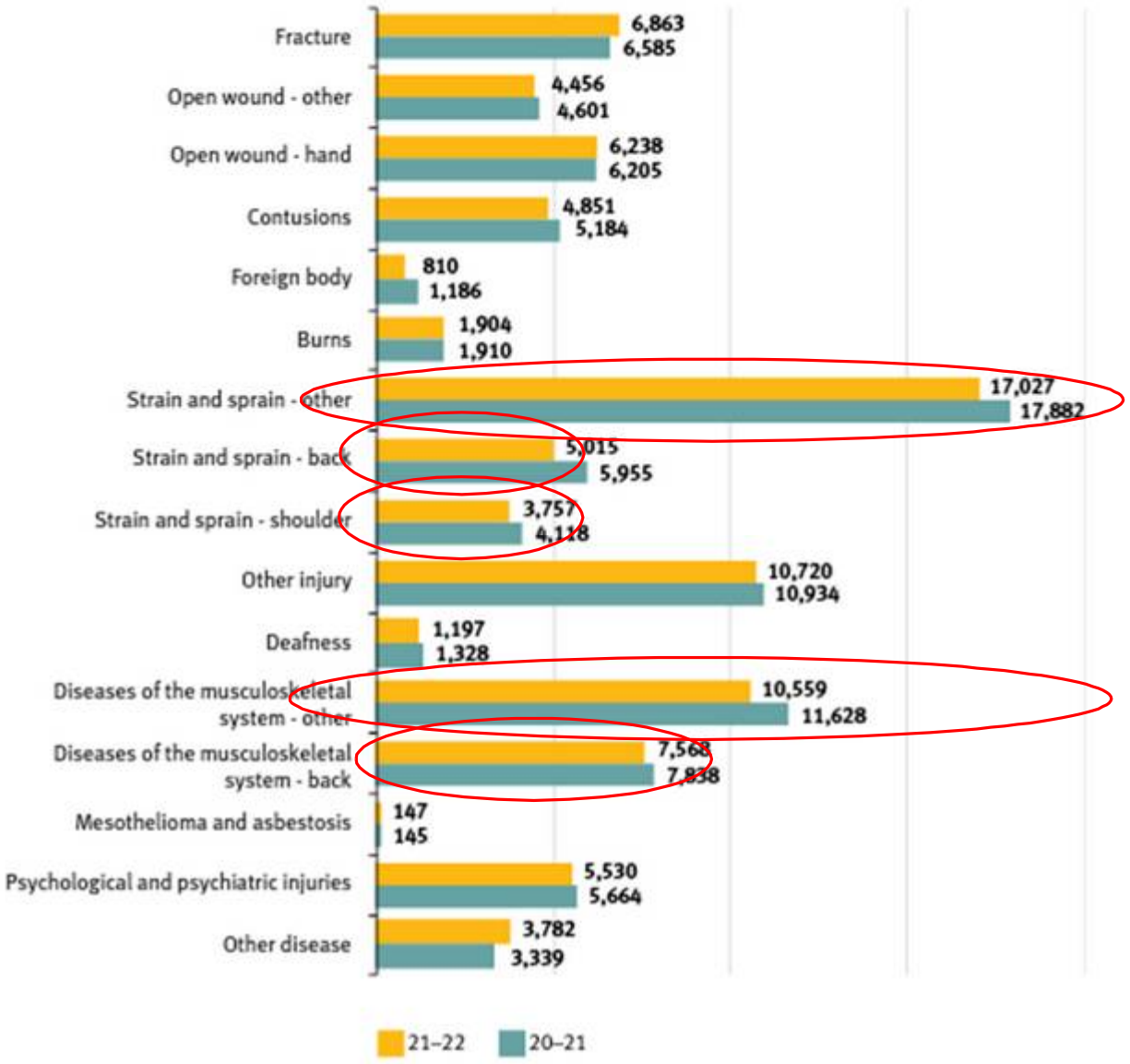


Oakman et al (2015) Risk management: Where should we target strategies to reduce work-related musculoskeletal disorders? Safety Science 73:99-105

Relative contribution to MSDs

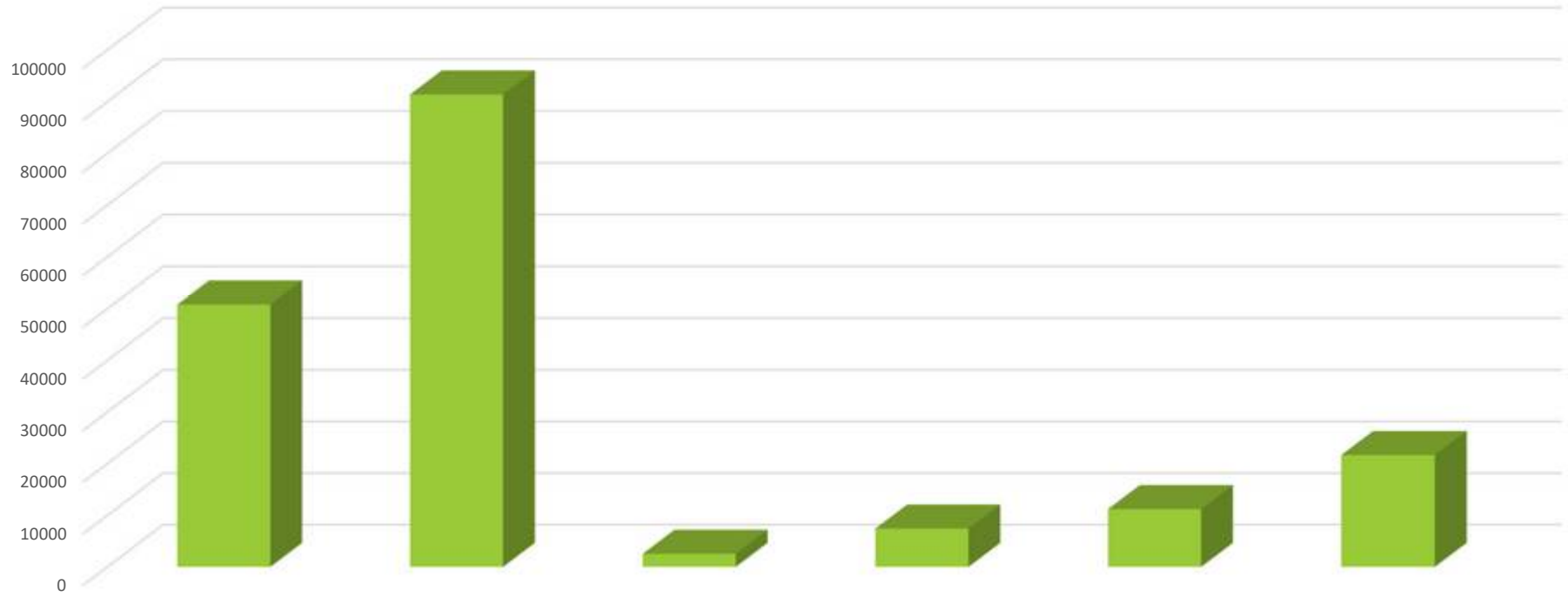
Hazard	Odds ratio for new back pain
High job intensity	1.8
High schedule demands	1.6
Job dissatisfaction	1.7
Low supervisor support	1.4
Lack of influence	1.2
Lack of job security	1.2
Lifting 10kg at work every day	1.2

Johnston et al (2003) Stressful psychosocial work environment increases risk for back pain among retail material handlers. American Journal of Industrial Medicine 43(2):179-187



QLD claims lodged by injury type 2020 - 2022

www.worksafeqld.com.au



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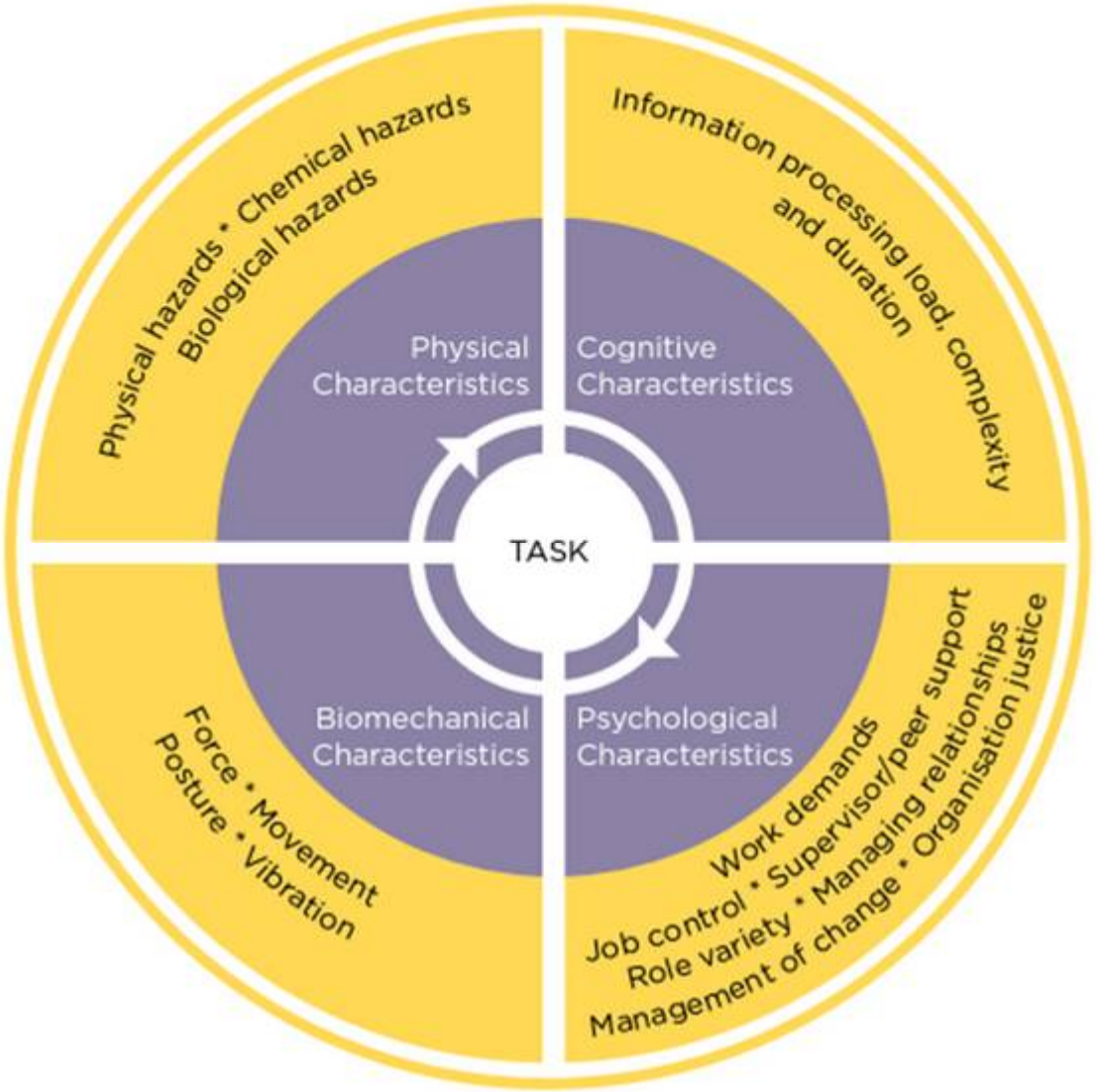
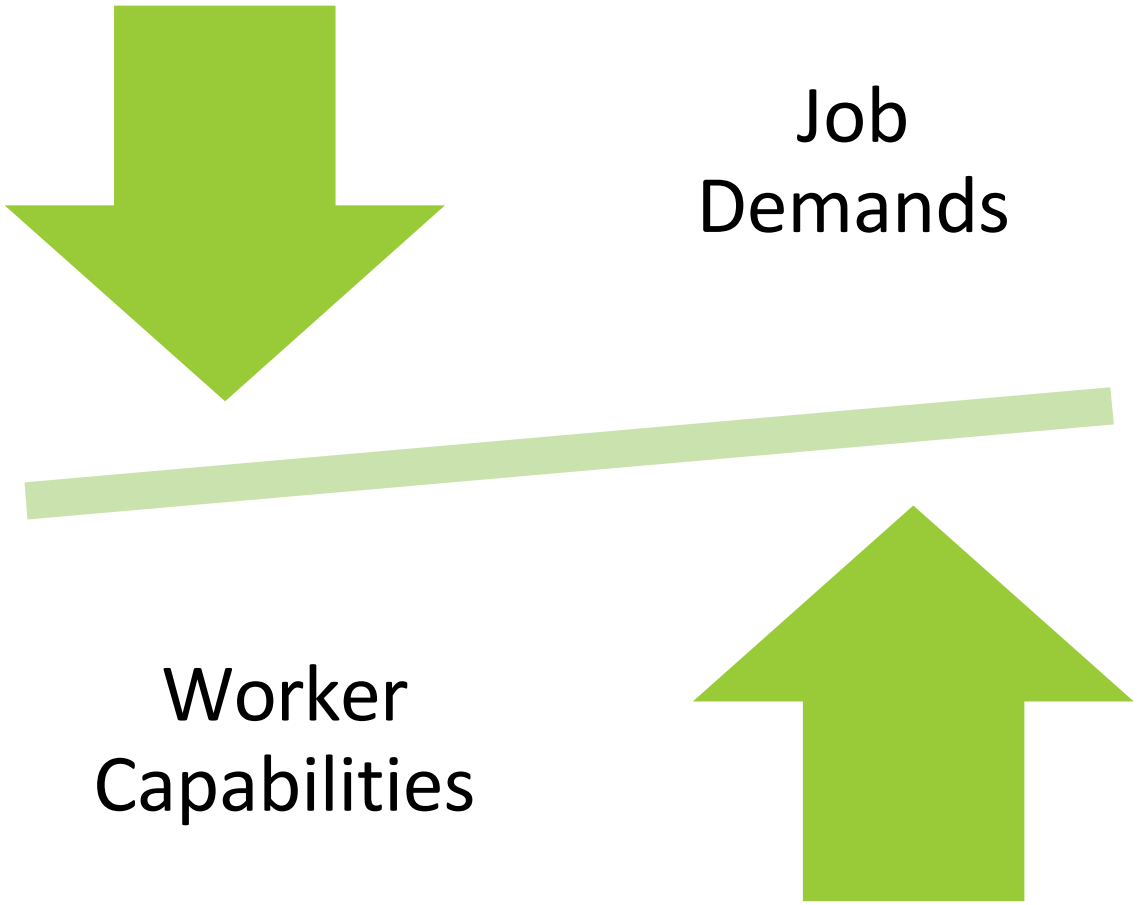

Physical hazards • Chemical hazards
Biological hazards
Information processing load, complexity and duration
Physical Characteristics
Cognitive Characteristics
TASK
Biomechanical Characteristics
Psychological Characteristics
Force • Movement
Posture • Vibration
Work demands
Job control • Supervisor/peer support
Role variety • Managing relationships
Management of change • Organisation justice

Feeling overwhelmed?


Job
Demands
Worker
Capabilities

Symptoms of poor work design, System issues:

Errors or poor quality output

Equipment breakdown

Increasing costs or slowing productivity

Tools or equipment not available

Resources misused or under-utilised

Unclear goals, reporting lines

Confused communication lines

Symptoms of poor work design, People issues:

Tension or conflict in teams

Employee dissatisfaction

High turnover

Talented people leaving the job

High absenteeism

Injured or ill employees

Lost time injuries or illnesses

Relative contribution to MSDs

	Physical factors	Psychosocial factors
Low back injury	11-80%	14-63%
Upper limb injury	11-95%	28-84%

Marras et al (2009) National occupational research agenda (NORA) future direction in occupational musculoskeletal disorder health research. Applied Ergonomics 40(1):15-22

Good work design addresses risk factors

Biomechanical risk factors:
Sustained or repeated awkward postures
Sustained or repeated exposure to force
High force or jerky movement
Repetitive movement
Vibration

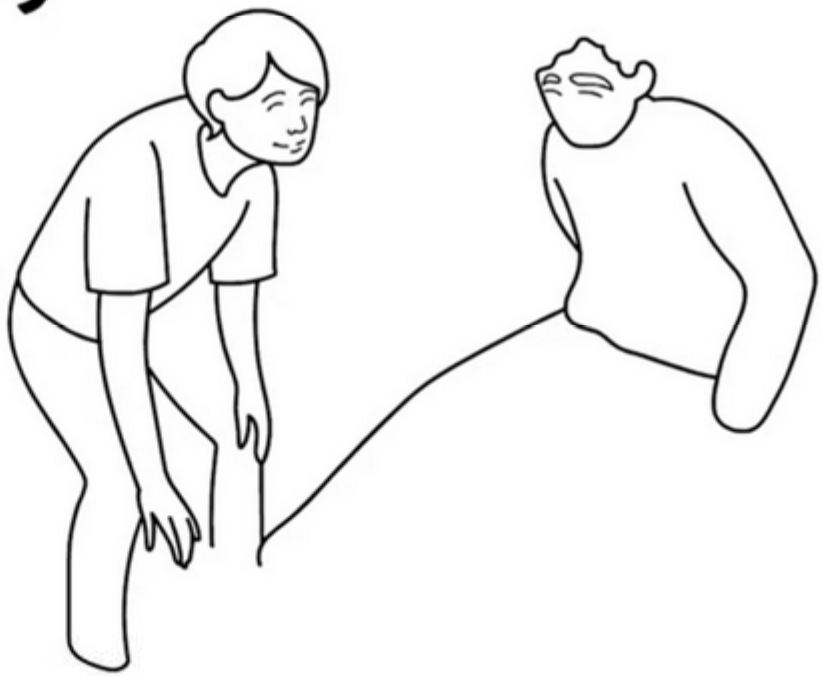
Psychosocial risk factors:
Low job control
Poor support
Poor organisational change management
Poor organisational justice
Exposure to traumatic events
Occupational violence or aggression

Good Work Design Examples

- Aged care and disability services
- Queensland Department of Transport and Main Roads
- Oil and gas mining
- Bundaberg Regional Council
- Return to work case example

Aged Care & Disability Services

Functional Mobility Screening



www.mobilityscreen.com.au

2022 Churches of Christ, Stanthorpe

All 90+ staff reported identifying 1-10 variances

100% perceived reduced risk of injury from hazardous people handling tasks and from resident aggression

Less resident aggression encountered

80% down to 73%

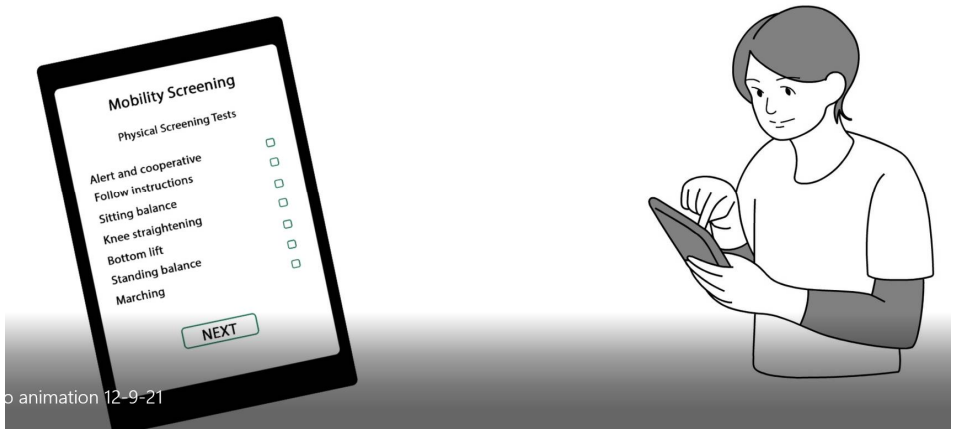
96% staff confident in screening tests

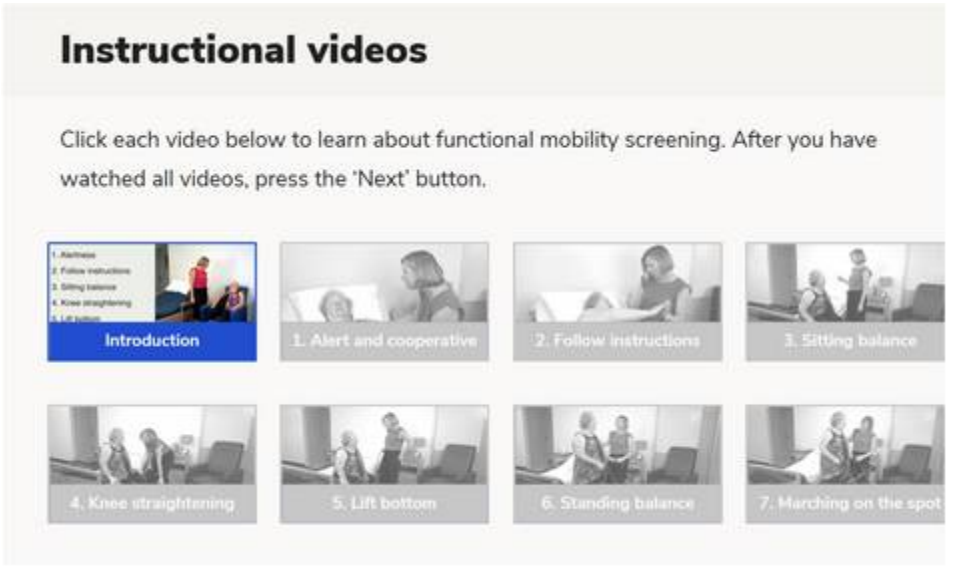
Reduced musculoskeletal discomfort

56% down to 45%

Reduced sprain strain incident reports

5 down to 3



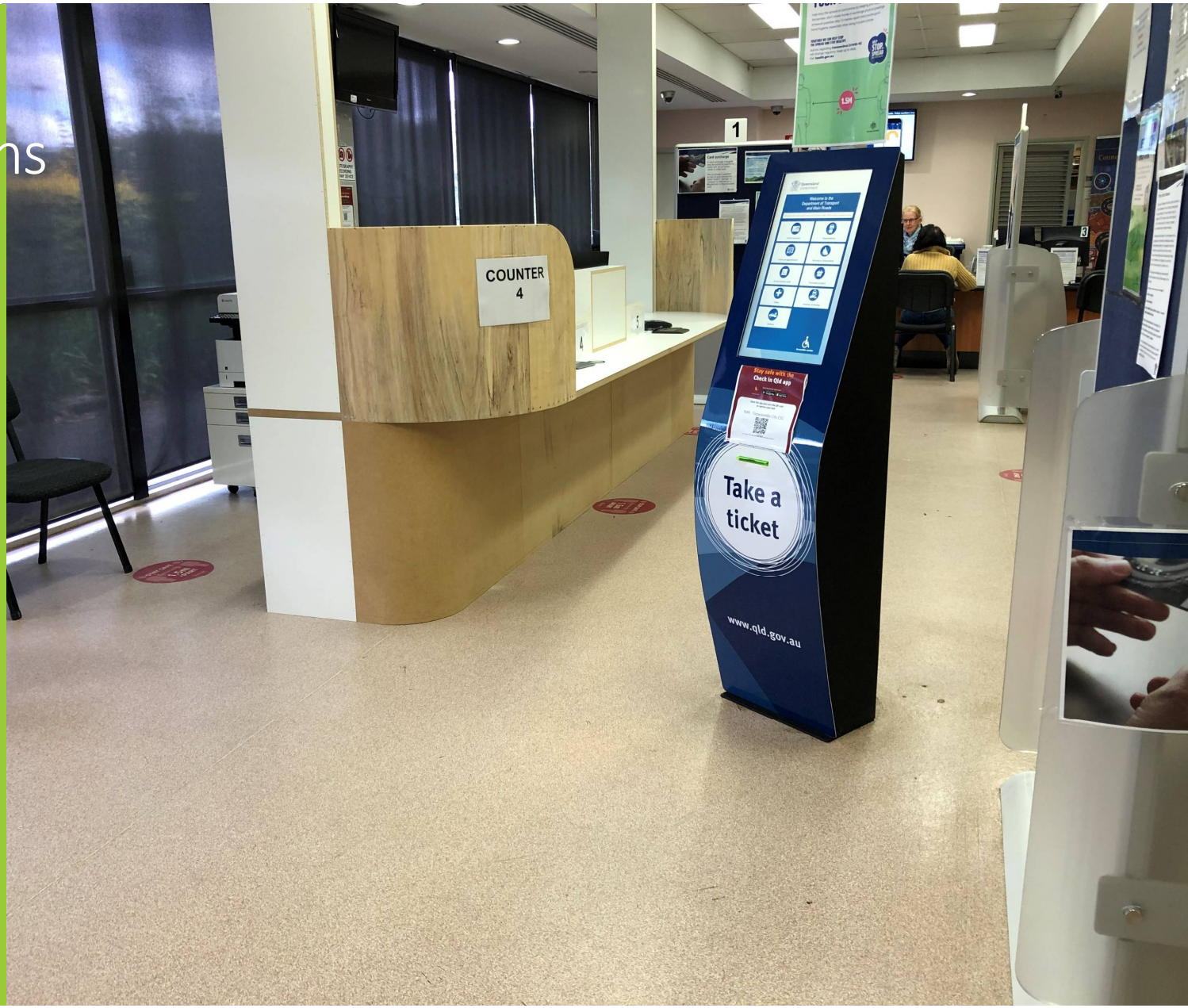


www.mobilityscreen.com.au

Transport and Main Roads: Customer Service

Design Considerations

- Biomechanical stressors
- Sedentary behaviour
- White noise
- Customer privacy
- Accessibility
- Staff safety
- Customer aggression
- Social distancing



1 2

Oil and Gas Drilling

Hazard identification training

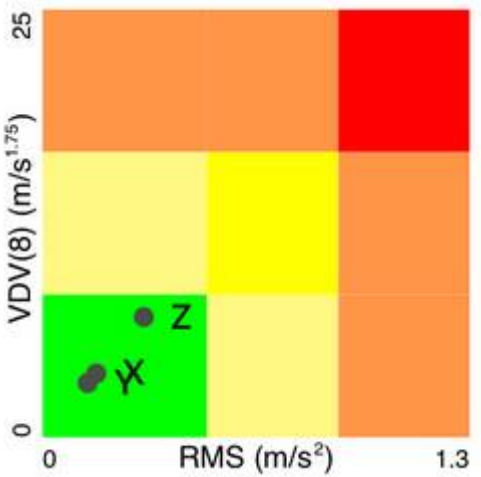
3 HMTs from each crew

Risk assessment by HSEs

Risk control workshops

Trial

ENSIGN
964



Vehicle & Plant Ergonomics
Bundaberg Regional Council

DUAL CONTROL
LEFT HAND DRIVE
383
442·ROX

DENNIS
DUAL CONTROL
BUNDABERG
114·SWG

DUAL CONTROL
LEFT HAND DRIVE
IVECO
BUNDABERG
239·XPI

How can you support Tim's RTW?

Return to work design

Coffee date to meet and greet

Ask Tim what he needs, wants, doesn't want

Engage a rehab provider

Negotiate start-finish times to reduce commute

Consider work from home

Retraining, upskilling, shadow colleague

Diarise check ins

Provide feedback on performance

Increase incidental movement eg. walking meetings

A guide for supervisors in small and medium businesses

Managing the relationship with an injured or ill worker during return to work

Why should you use this guide?

Small and medium businesses can face complex challenges when their workers become ill or injured. Managing return to work processes can be stressful, as you juggle what is best for the business and the worker. Sometimes it may feel like these are at odds with each other. However, providing support to your injured or ill workers makes a big difference to their return to work and psychological health, and sends a message to workers that your business has fair processes.

Who is this guide for?

This guide focuses on the most important relationship: the one between the supervisor and the injured or ill worker. If you are the supervisor or manager of the injured or ill worker, you can help make the return to work process a success by staying in touch with your worker, and following the suggestions in this guide.

If you do not supervise or manage staff (e.g., if you only have a different role, for example if you are the return to work coordinator, or the owner of the business, or the person in charge of HR and administration), please share this document with the supervisor of the injured or ill worker.

Throughout this document we use the word 'supervisor' to refer to someone who has direct responsibility for managing workers. Your business may use the word 'manager', but these documents will still provide a helpful guide.

This guide will help you:

Stay in touch with your injured or ill worker (see 'conversation starters' on **pages 4-11**) and keep the team in the loop (**page 7**)

Make changes to the workplace and/or to the work duties your worker does, to help them return to work sooner (see 'suitable duties' guide on **pages 12-15**)

Businesses/employers also have other formal responsibilities related to a workers' compensation claim

These responsibilities depend on where you are, so check with your insurer or jurisdiction's workers' compensation authority. The workers' compensation process usually requires three areas of management:

- the claims administrative process
- the medical management of the claim, and
- your worker and your relationship with them.

This guide focuses only on supporting your relationship with your worker, but being attentive to your legal obligations, administrative requirements and the medical management of a claim also builds trust and improves business outcomes. When broader obligations relating to the administrative or medical processes are mentioned in this guide, they are highlighted in orange and with a ⚠.

RETURN TO WORK

safe work australia

Managing the relationship with an injured or ill worker during return to work 1

Good Design in Return to Work

Stay in touch, open questions, offer genuine care, diarise check ins

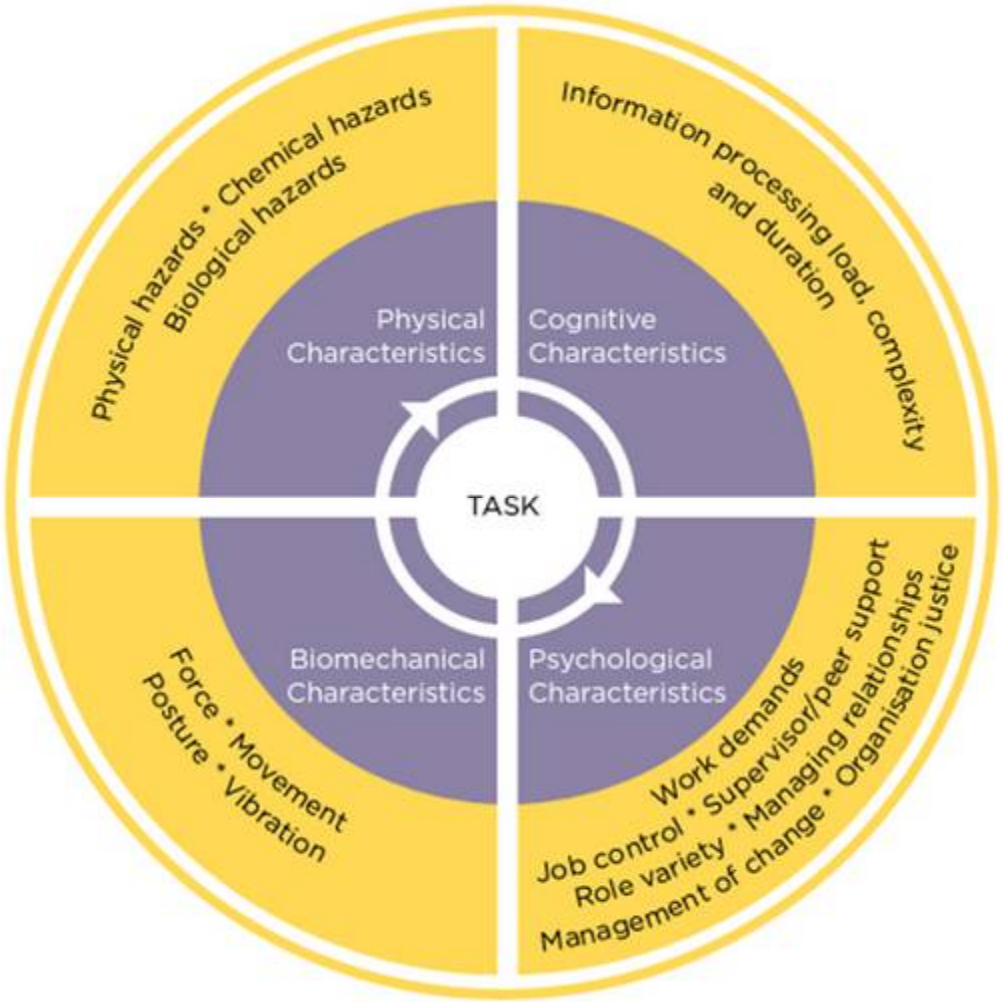
Make accommodations in duties

Talk to the team

Intervene early

Engage an occupational rehabilitation provider

Provide similar support whether the injury/illness is work-related or not



Good Work Design: The What

Good Work Design: The How

- Identify hazards
- Assess risks
- Consult with workers, users, SMEs, designers, manufacturers, suppliers etc.
- Engage leaders, decision-makers

Good Work Design: The Why?

Questions?

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Injury Prevention & Management