GOVERNMENT OF WESTERN AUSTRALIA

Department of **Local Government, Industry Regulation and Safety**

WorkSafe Western Australia

October is Safe Work Month

Safe work is for *life*

Darryl Griffiths · Senior Inspector Scientific Officer, WorkSafe



Webinar – Safe Work Month 2026

HSR Lunch and Learn

Hazardous manual tasks and MSDs

A note before we start

Today includes a serious workplace injury case study. If anything raised affects you, contact Lifeline 13 11 14, Beyond Blue 1300 224 636 or your EAP provider.

Introduction

Sally North, WorkSafe Commissioner

Acknowledgement of Country

The Department of Local Government, Industry Regulation and Safety (LGIRS) respectfully acknowledges Aboriginal peoples as being the custodians of Western Australia.

We acknowledge the enduring connection Aboriginal people continue to share with the land, sea and sky through both their ancestral ties and custodianship to Country.

We pay our respect to Elders both past and present, and acknowledge the value brought to our department through the collective contribution of Aboriginal and Torres Strait Islander peoples across Western Australia.



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Slido for Q and A

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A true story

Ten work-related incidents, including near misses. Nothing changed.

Then a 300 kg cart tipped and trapped a worker beneath it. What could a HSR have noticed, asked or done before that happened?



10 warnings.
1 hospitalisation.

Your value is in

Listening to workers
Looking at how work is done
Asking good questions
Acting before people are hurt



LISTEN

to workers about pain, discomfort and the jobs that cause pain or discomfort.



LOOK

at how the work is performed — how do workers perform the task?



ASK

questions — what measures are in place to control the risks of the task?



ACT

early: consult, request a review, use your powers.

Your role as an HSR: Turning concerns into action

Observe hazardous manual tasks

Watch the job being done. Spot the risk factors.

Be the voice of your work group

Represent workers' concerns to management.

Be consulted

On risk assessments, controls and reviews.

Inspect your workplace

After reasonable notice; none needed after a serious incident.

Take part in investigations

Review findings, give input, attend interviews if asked.

Stop work if there's a serious risk

If you observe a worker conducting a task that creates a serious risk of injury HSRs can direct the work to cease. Advise PCBU straight away.

Your legal functions: represent, monitor, investigate, inquire. Acting in good faith, you hold no more legal duty than any other worker.

Quick poll: which response is most common after a manual-task incident?

1. Retraining the worker
2. Telling people to take more care
3. Reviewing how the task is designed
4. Updating the procedure



What are MSDs?

Musculoskeletal disorders: injuries to, or diseases of, the muscles, nerves, tendons, ligaments, joints, cartilage and spinal discs.



Sudden (acute)

- Bulged or ruptured disc
- Torn ligament, e.g. ACL
- Meniscal tear of the knee

Builds over time (chronic)

- Tendinopathy: wrist, elbow, Achilles
- Carpal tunnel syndrome
- Vibration white finger

Most work-related MSDs are the slow kind — they build up quietly.

Why this matters in WA

Body stressing is muscular stress from lifting, handling, holding or repetitive movement. (WorkCover WA)

32%

of all workers' compensation claims in WA in FY24 were for body stressing

5,500

lost-time claims a year, on average (2019-20 to 2023-24)

$57,000

average cost of a body-stressing claim

The most serious injuries affect the lower back and shoulders

What is a hazardous manual task?

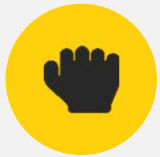
Any task where someone lifts, lowers, pushes, pulls, carries, moves, holds or restrains a person, animal or thing — and it involves one or more of these:



Sustained or awkward posture



High or sudden force



Repetitive or sustained force



Repetitive movement



Vibration

Many different types of work and workplaces: computer work, driving, handling people, assembly and powered tools all count.

Spot the early warning signs



Early warning signs: pain · discomfort · task avoidance

What workers say

- Aches, niggles, numbness
- Avoiding or swapping a task
- Tired before the shift ends

What you see

- Workarounds and shortcuts
- Awkward postures, straining
- Same people off sick or leaving

What the data shows

- Repeat strains, same body part
- Discomfort survey results
- Claims and first-aid trends

The earlier you act, the less it costs - for the worker and the workplace!

Posture and repetitive movement

These risks build up over time. The longer a posture is held, or the more often a movement is repeated, the greater the chance of injury.



Sustained or awkward posture

Uncomfortable or unnatural position, or held for more than 30 seconds



Repetitive movement

Same body parts, similar movements — more than twice a minute

ASK Does this task involve bending, twisting or reaching, or repeating the same movement — and for how long or how often?

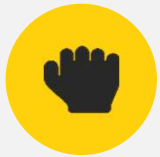
Force and vibration

There is no magic “safe weight limit”. Risk depends on posture, distance, how often and how long.



High or sudden force

Lifting, lowering, carrying; loads hard to start or stop; jerky movements



Repetitive or sustained force

Gripping, handling, pushing or pulling — repeated or held over time



Vibration

Whole-body (vehicles, mobile plant) or hand-arm (powered tools)

ASK Are tools well maintained, exposure time limited, and is there a lower-force alternative?

Duration

Time on a task without a break, or exposed to a risk factor across a shift. Not a risk factor itself, but it makes the risk worse.



Long duration

More than 30 minutes continuously, or 2 hours in total over a shift

ASK How long is this done without a break, rotation or change of posture — and do other tasks load the same body parts?

Look upstream: what makes a task hazardous?

Risk factors place strain on the body. Sources of risk are the underlying reasons the work creates that strain—and usually point to the most effective solutions.



Work area design and layout

Bench heights, reach distances, space to move



Work environment

Heat, cold, slippery floors, poor lighting



Systems of work

Pace, time pressure, staffing, breaks, training



Load, tools and equipment

Size, weight, grip, balance, maintenance



Human variation

Good design accommodates the range of people doing the job

HSR question: “What aspects of this task make it hard to perform”?

Spot the risk

Risk factor: posture · force · repetition · vibration







Poll: what is the main risk factor in each photo?

Fix the task, not the worker

Most effective at the top, least effective at the bottom

Aim for the Green Zone

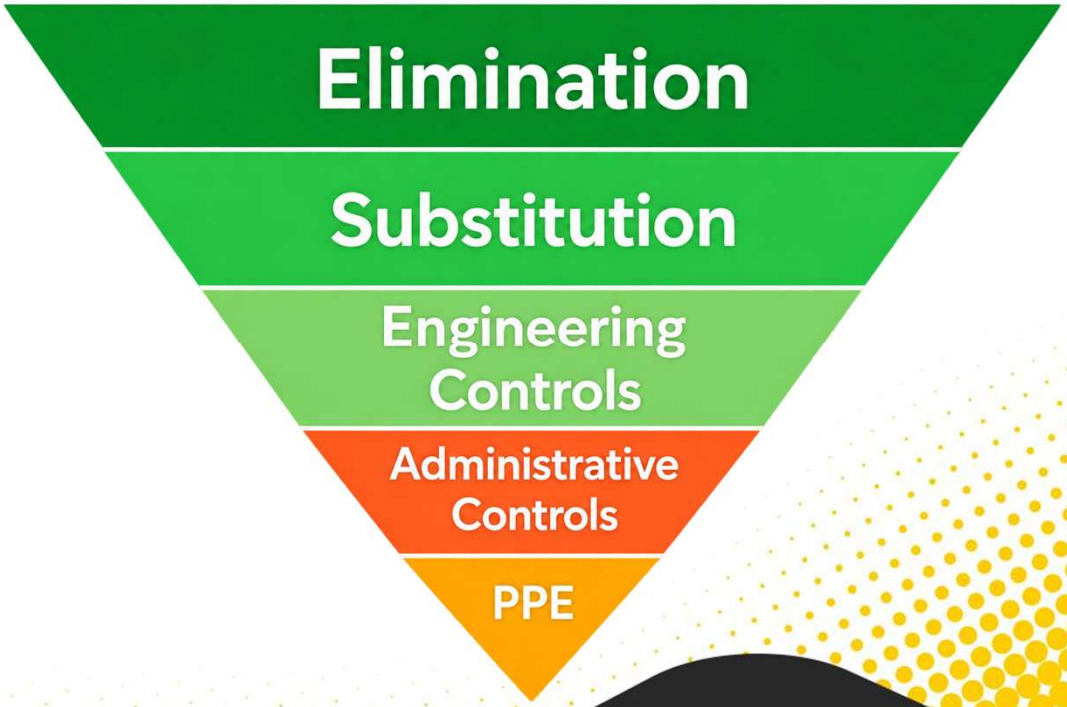
ELIMINATION
Automate it, or deliver materials directly to the point of use

SUBSTITUTION
Swap heavy items for lighter ones, or hand tools for power tools

ENGINEERING CONTROLS
Mechanical aids, adjustable workstations, vibration isolation

ADMINISTRATIVE CONTROLS
Provide training, task rotation, procedures and supervision

PPE
Limited protection from manual task risks; a last resort only



Fix the task, not the worker





ELIMINATION

Repetitive bending, twisting, grasping of bottles eliminated through automation





SUBSTITUTE

80 L bins → 240 L wheelie bins: a mechanical aid





ENGINEERING

Pallet leveler raises the load to a good working height

“How to lift” training is not a control by itself



It doesn’t change the task

The load, layout, pace and required postures remain unchanged.

The evidence doesn’t support it

Evidence to date does not support lifting-technique training as a control for manual task risks.

What to listen for

If the answer is “we trained them”, ask what changed about the task itself.

Suitable and adequate training (Reg 39)

Training supports effective task controls—it does not replace them. Good training covers:



The specific risks of your tasks

and the measures in place to control them



How to do the task safely

including mechanical aids, tools, equipment and safe work procedures



Manual task risk management

including what makes a task hazardous



How to report a problem

including maintenance issues

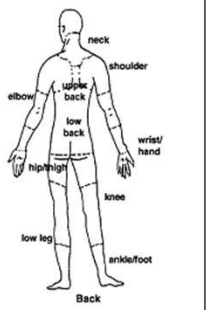
The PErforM tool

Participative Ergonomics for Manual tasks

Use PErforM to assess a task together, as a team, with the people who do it.

1. Pick a task workers are concerned about
2. Discuss exertion, posture, vibration, duration, and repetition as a team
3. Agree which risk factors need controls
4. Agree controls: redesign first, administrative second

Exertion -How much force is the person using? – think about starting or stopping quickly					**Body part**
1 No effort	2	3 Moderate force & speed	4	5 Maximum force or speed	
Awkward posture - How awkward is the person's posture?					
1 All postures neutral	2	3 Moderately uncomfortable	4	5 Very uncomfortable	
Vibration- How much are the whole body or hand(s) being vibrated?					
1 None	2	3 Moderate	4	5 Extreme	
Duration - How long is the action performed for?					
1 < 10 minutes	2 10-30 min	3 30 min – 1 hr	4 1 – 2 hrs	5 > 2 hrs	
Repetition- How often are similar actions done?					
1 No repetition	2	3 cycle time < 30 s	4	5 cycle time < 10 s	



Worksheet 2: assess five risk factors against each body part, as a team

Case study 1: the 300 kg cart



What happened

- Worker alone, unloading a parts cart from a trailer
- Casters misaligned: the cart tipped
- Worker trapped under 300 kg and hospitalised

What was found

- 20 workers, 5–6 loads a day each
- Push force far above the recommended limit
- Handle too high; small casters
- No risk assessment despite ten work-related incidents, including near misses

What a HSR could consider

- Discuss the task with workers to understand their concerns
- Observe the task
- Discuss any ideas to make the task easier, better, safer

Case study 1: what changed

What changed

- Trailers replaced by a one-person train system
- Push force reduced by 68% from 663 N to 209 N
- Bigger casters, lower handle



Note the hierarchy of controls: substitution and engineering measures

Case study 2: airport baggage handling



The job and the cost

- 6,000–12,000 kg lifted per handler, per shift
- Bags average 23 kg, up to 32 kg
- About 80 claims a year; average $48,000

What was found

- “Safe lifting” training was the main control
- No mechanical aids in use
- Work area forced a 180° turn
- Ask-for-help advice not followed

What an HSR could ask

- Discuss the task with workers to understand their concerns
- Observe the task
- Discuss any ideas to make the task easier, better, safer
- Have workers seen it done better anywhere else?

Case study 2: what better looks like



Vacuum lifter at another airport

What 'better' looks like

- Vacuum lifters used at other airports
- Consult handlers, airlines and the airport
- Design out lifting in terminal upgrades

Note the hierarchy of controls: engineering controls implemented, as opposed to lifting training

What to look for on your walk-around

- **People avoiding, complaining about or working around a task**
- **No mechanical aids, or aids that aren't used, or faulty aids**
- **Bending, twisting, reaching, kneeling or holding still**
- **Rushed pace, working alone, short-staffed**
- **Heavy, bulky or awkward loads handled manually**
- **Vibrating tools or plant, slippery floors, heat or cold**

Ask the people doing the job—they know which tasks are difficult, tiring, or uncomfortable.

Five questions to ask

1. What manual work tasks are performed here?
2. Which work tasks have caused injury, discomfort or fatigue in the past two years?
3. What changes and improvements were made to the task after someone was hurt?
4. Are further improvements possible? (not just more training)
5. How do workers report problems, and when were the controls last reviewed?

Remember: You can request a review of control measures under Regulation 38.

Provisional Improvement Notices (PINs)

Consult with the PCBU and try to resolve the issue first.
If the consultation is ineffective, a trained HSR may issue a PIN.

1

Consult

Talk with the person who may receive the PIN. Explain the risk and your concerns, listen to their views, and first try to agree on a solution.

2

Issue the PIN

Set a compliance date that allows at least eight days for the issue to be addressed.

3

PCBU may request a review

This must be done within seven days of the PIN being issued. This is separate from the minimum eight-day compliance period. An inspector will review the PIN and make a decision.

Three actions to take back to work

1

Consult your work group

Discuss the task with the people who do it. Raise what you are seeing and listen to what they are experiencing.

2

Raise concerns with the PCBU

Share what you have found promptly—don't wait for an injury or a formal process.

3

Monitor the control measures

Check that controls are in place, being used and working effectively. If they are not, request a review.

Contact and resources

Contact WorkSafe: 1300 307 877
General WHS enquiries and guidance

Hazardous Manual Tasks Code of Practice
Practical guidance to identify, assess, control and review

Manual task checklist and incident worksheet
On the WorkSafe WA hazardous manual tasks page

HSR Matters hub
A direct line to WorkSafe's Safety Education team

Full guidance page

worksafe.wa.gov.au/worksafe/hazardous-manual-tasks

Fix the task — not the worker.

Listen. Look. Ask. Act.

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Email hsrmatters@lgirs.wa.gov.au if we couldn't respond to your question in today's session

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