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MSD Prevention: Responding to employee concerns

Mike Papakyriakou
Occupational Health and Safety
mikepapa@yorku.ca or x33477
yorku.ca/ergo

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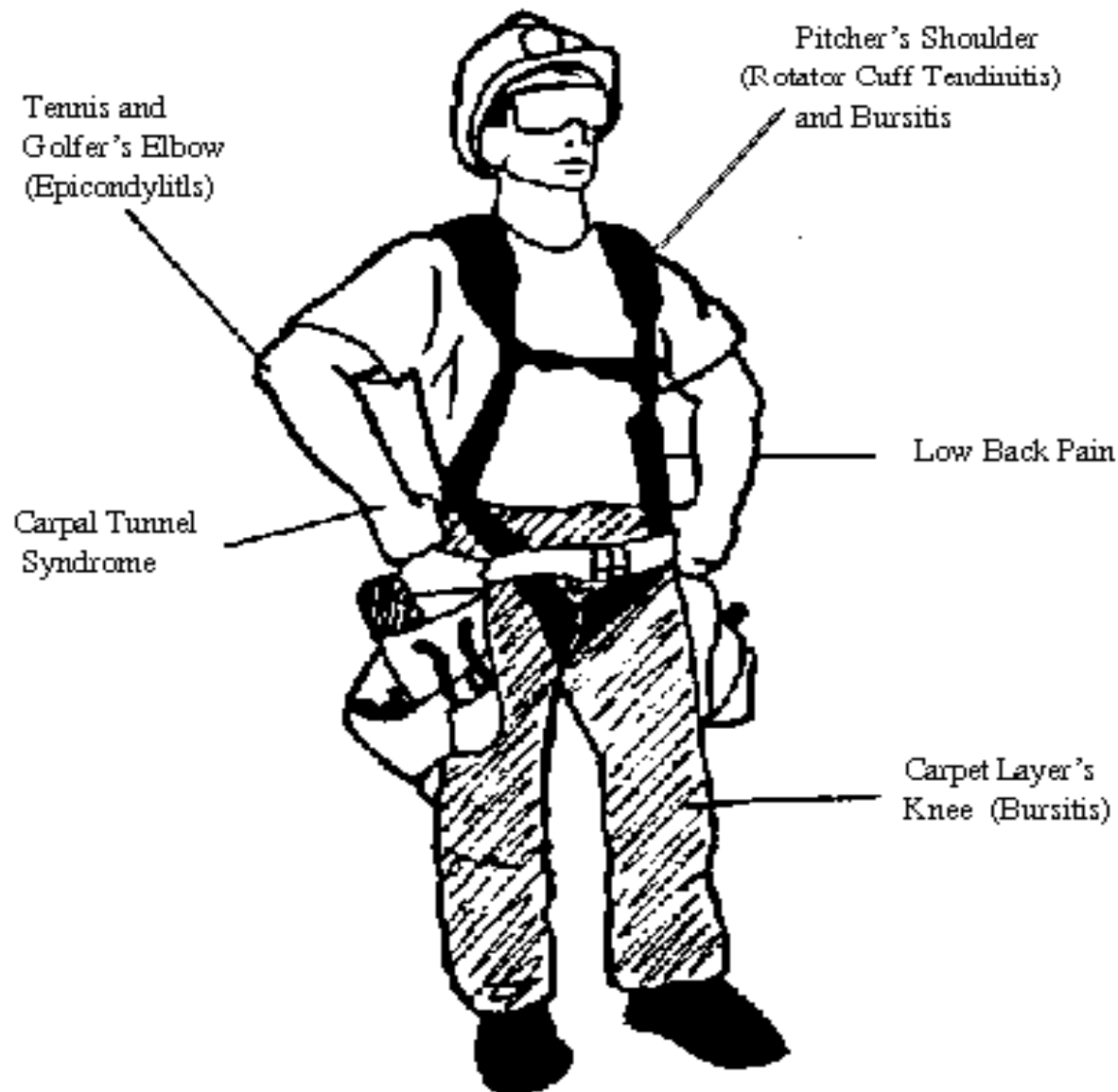
Table of contents

- [Overview](#)
- [Health care](#)
- [Identifying difficult activities](#)
- [Body mechanics](#)
- [Make the activity easier](#)
- [Getting help with the activity](#)
- [Procedure/Work method](#)
- [Evaluate changes](#)
- [Communicate lessons learned](#)

Printable Tools:

- [Non-computer related activities](#)
- [Computer related activities](#)
- [Outline of this presentation](#)

Some types of musculoskeletal disorders (MSDs)



[<Skip Introduction>](#)



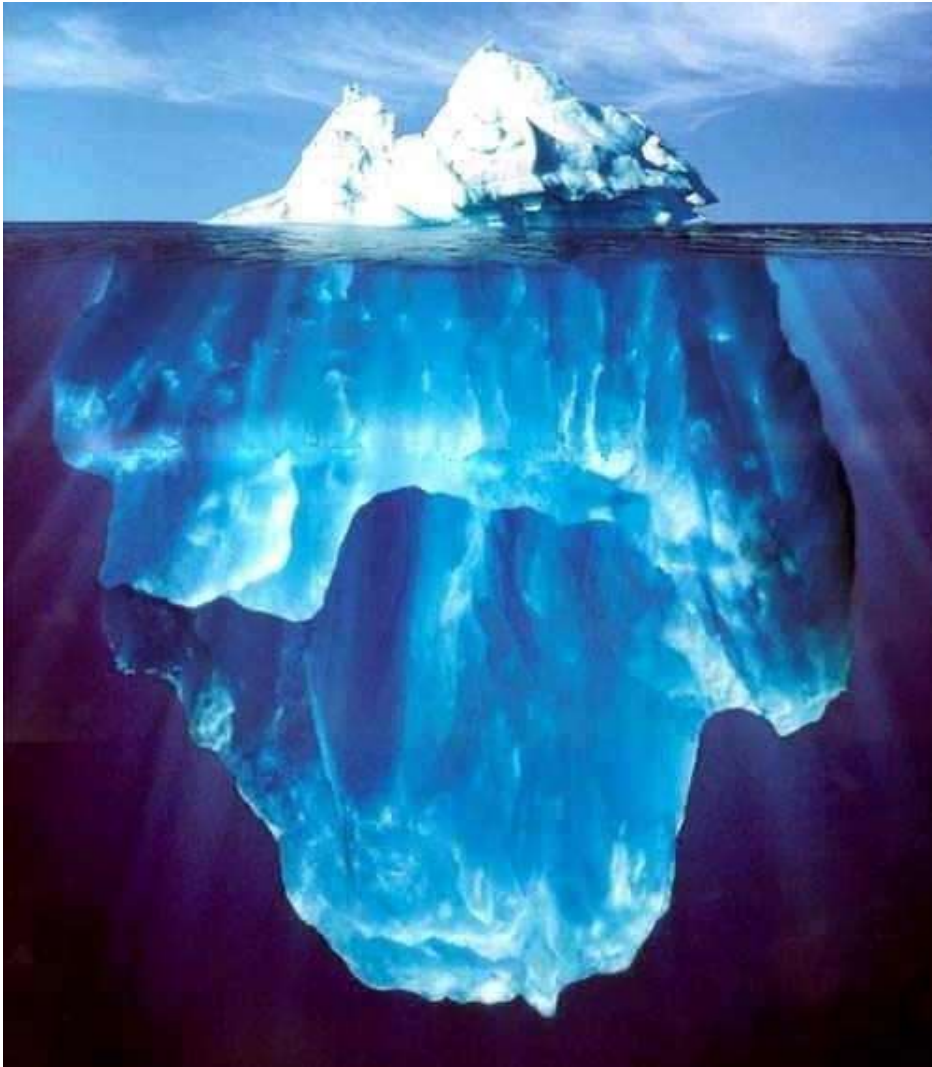
Purpose of this procedure

- Help employee experiencing
 - Difficulty with an activity
 - Musculoskeletal discomfort
 - Musculoskeletal injury (work-related or not)
- Outcomes
 - Help the employee
 - Increase/maintain productivity
 - Avoid (aggravating) injury
 - Use lessons learned to help others

Process overview and details

- Overview
 - www.yorku.ca/ergo/msd_flowchart-sair.pdf
- Details
 - <http://ergo.info.yorku.ca/musculoskeletal-discomfort-response-procedure/>
- Supervisors Accident Investigation Report (SAIR) not always required
- Even if SAIR has been done
 - the 24 hour timeline for the SAIR is not enough to develop a good prevention plan for MSDs
 - this process will help identify additional preventive actions

Benefits of proper response



- LTD/WSIB costs ↓
- Staff morale ↑
- Productivity ↑
- Work quality ↑
- Effort accommodating injured/disabled employees ↓
- Absenteeism ↓
- Turnover of staff ↓

Importance of supervisor's response

Liberty Mutual Research Institute for Safety

“the impact of the **supervisor's response** [to a report of musculoskeletal discomfort] on the disability outcome was more important than the severity of the injury or the quality of medical care.”

- Encourage early reporting
- Take all complaints seriously
- Provide private and confidential exchange
- Encourage medical evaluation and treatment
- Engage employee in problem solving to reduce discomfort

3 stages of gradual onset MSDs: Stage 1 (easiest to help)

- Mild discomfort, present while working
 - Disappears when not working
 - Does not affect work performance or daily living tasks
 - Completely reversible
-
- Source: WorkSafeNB, ERGONOMICS GUIDELINES FOR MANUAL HANDLING, 2nd EDITION (2010)
 - <http://www.worksafenb.ca/docs/MANUALEdist.pdf>

Stage 2 (more difficult to help)

- Pain is present while working and continues when not working
- Begins to affect daily living tasks
- Employees sometimes take nonprescription pain medications
- Completely reversible

Stage 3 (most difficult to help)

- Pain is present all the time
- Employees seek medical attention
- May not be able to complete simple daily tasks
- May not be completely reversible to reach full recovery

Process: How to respond

1) Provide advice on health care options

- see a doctor
- discuss a referral to a musculoskeletal specialist (e.g. sports injury clinic)
- [Sports injury clinics on campus](#)

2) Activity review/interventions

Follow up steps

3) Evaluate any changes made to make sure they are working (see Ergonomics Change Evaluation Tool)

4) Communicate lessons learned to other staff

2) Activity review/interventions: Computer related

- Printable tool
- <http://ergo.info.yorku.ca/computer-workstation-checklist/>

2) Activity review/interventions: Non-computer related

- What activities does the employee find difficult?
- Review body mechanics.
- Could the activities be made easier? (see Activity Improvement Tool)

Reference Material

- 1) Provide advice on health care options (e.g. sports injury clinics).
- 2) What activities does the employee find difficult?
- 3) Review body mechanics.
- 4) Could the activities be made easier? (see Activity Improvement Tool)

Follow up steps

- 5) Evaluate any changes made to make sure they are working (see Ergonomics Change Evaluation Tool)
- 6) Communicate lessons learned to other staff

1) Provide advice on health care options

1) Provide advice on health care options

- For discomfort or injury
 - see a doctor
 - discuss a referral to a musculoskeletal specialist (e.g. sports injury clinic)
 - [Sports injury clinics on campus](#)

2) What activities does the employee find difficult?

People can become defensive if asked a lot of questions

When you meet, try to put the employee at ease:

- Thank you for coming to me with this problem.
- So that we can come up with a solution together, I need to ask some questions.
- Can you tell me more about the difficulty you're having?
- What activities are you having difficulty with?

Other Useful Questions

- Could you help me understand why you did/didn't do that?
- Is there anything else you would like to add?
- Could you give me an example so I can better understand this?
- I'm not sure I understand. Can you explain a little more?
- Ok, let's see if I have this right. What I think you are saying is...

3) Review body mechanics

3) Review body mechanics

- One on one review of body mechanics (DOHS can help you with this)
- If less urgent, Material Handling/Back Safety workshop
 - Refresher every 3 years
 - [OHS Ergonomics information and workshops](#)
- Although providing training in proper body mechanics is important, it is not always the most effective intervention:
 - The safe way may be slower or less convenient.
 - Employees may forget.
 - There may be situations where it is not possible to use proper body mechanics.

4) Could the activities be made easier?
(see Activity Improvement Tool)

Time saver tips

- Share **Activity Improvement Tool** with employees ahead of time to help them prepare for your meeting
 - Employee with concern
 - JHSCs
 - CSBO Leadership groups

Activity improvements (ergonomics)

Address problems with
Tools, equipment, processes, materials

- Too awkward
- Too heavy
- Too high
- Too low
- Too far
- Too frequent
- etc



Engineering controls

- Engineering controls (e.g. better tools)
 - Greater likelihood of success than administrative controls (e.g. training)
 - But not always feasible in the short term
- Administrative controls:
 - Requires employees to do things the right way...
 - But employees don't always do things the right way
 - Everyone makes mistakes

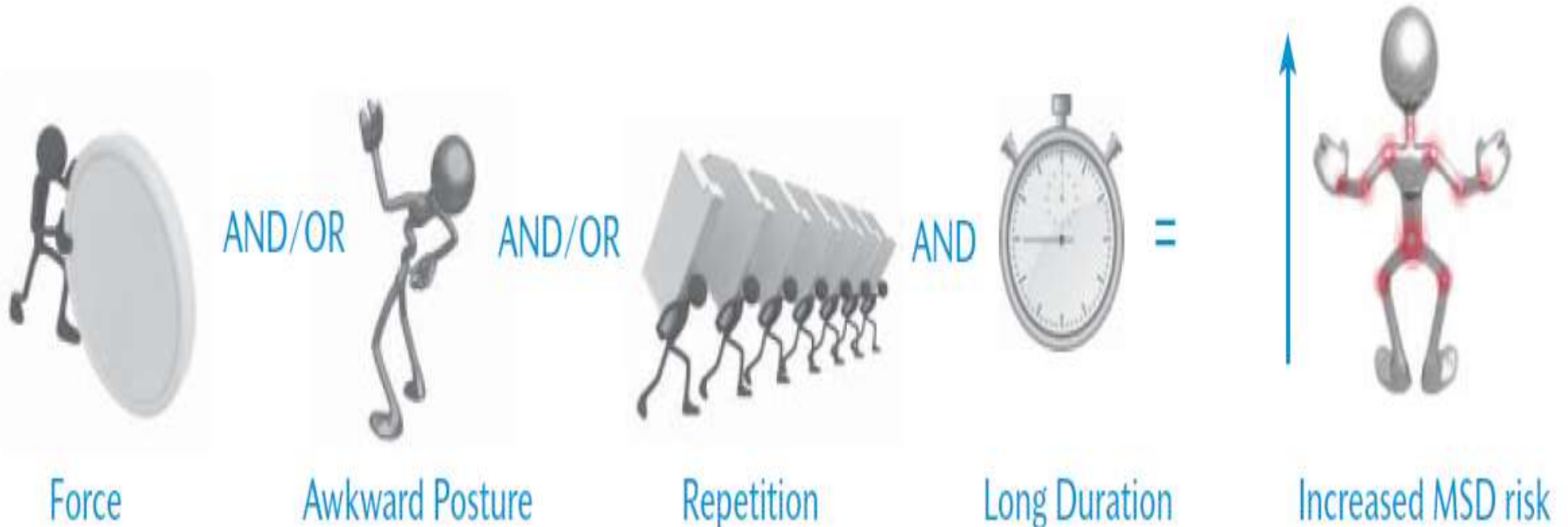
If the employee is experiencing discomfort...

- Examine the activity being performed when the discomfort started.
- Ask the employee about other activities that were not a problem before, but may be now.
- If the employee is currently not at work
 - talk with them when they return.

If more than one activity is difficult...

- Refer to your list of all the difficult activities
- Prioritize
 - Ask employees to rate the level of difficulty for each activity to help prioritize areas for improvement
 - Example:
 - some difficulty
 - moderate difficulty
 - almost impossible

What are the physical demands/hazards that caused (or could be causing) the difficulty?



Source for the graphics on this and the following slides:
Occupational Health and Safety Council of Ontario,
[Musculoskeletal Disorders Prevention Series](#), Part 3A: MSD
Prevention Toolbox: Getting Started

LIFTING/LOWERING

HAZARDS



Lifting from the floor



Overhead lifting



Lifting out of a bin



Lifting while reaching



Lifting heavy loads

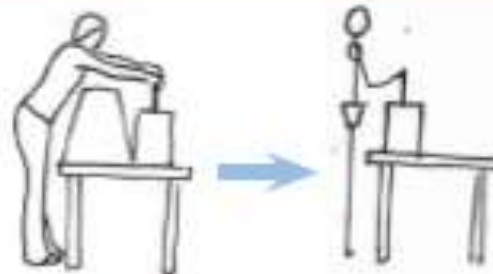
SOLUTIONS



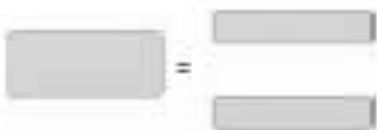
Store materials off the floor



Use lift/tilt devices



Remove obstacles between worker and load



Split heavier loads to reduce risk



Keep lifts below shoulders and above knees



Use a well-designed lifting device

PUSHING/PULLING/CARRYING

HAZARDS



Difficult pushing



Difficult pulling



Carrying heavy loads

SOLUTIONS



Use well-designed carts



Use a powered pusher



Use big wheels on carts/bins



Use dollies/carts



Use powered pallet jack



Use conveyors to move materials

GRIPPING HAZARDS



Difficult power gripping



Difficult pinch gripping



Difficult pinch gripping

SOLUTIONS



Use good power grips



Use boxes with good handles



Use tools/equipment with good hand grips



Use tool balancers for heavier hand tools

BACK/TRUNK POSTURES HAZARDS



Bending forward



Bending backward



Bending to one side



Twisting

SOLUTIONS



Angle work surface up



Adjust work surface height



ARM/SHOULDER POSTURES

HAZARDS



Hands above shoulder



Elbows/arms away from body



Arms behind the body

SOLUTIONS



Use long handle extensions



Use lift tables with turntables on them



Keep lifts below shoulders and above knees



Use adjustable height work platforms

HAND/WRIST POSTURES

HAZARDS



Bending the wrist down



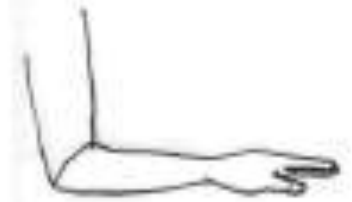
Bending the wrist up



Bending wrist sideways



Working with palm facing up



Working with palm facing down

SOLUTIONS



Select tools that promote good wrist postures and power grips



Choose tools that are right for the task/working height

HEAD/NECK POSTURES

HAZARDS



Neck bent forward



Neck bent backward



Neck bent to one side



Neck turned to one side

SOLUTIONS



Raise task/equipment to reduce forward neck bending



Place important visual displays directly in front of user



Provide head sets to reduce side bending of neck



Angled document holders/work surfaces improve neck postures

REPETITIVE HAND USE HAZARDS



Hand-intensive manual softening/packaging



Keyboard use



Repetitive hand tool use

SOLUTIONS



Use good job rotation schemes



Switch hands from time to time



Use well-designed power tools



Take breaks

REPETITIVE AWKWARD POSTURE

HAZARDS



Repetitive reaching/lifting to shoulder height



Repetitive working and bending



Repetitive twisting and reaching



Repetitive bending

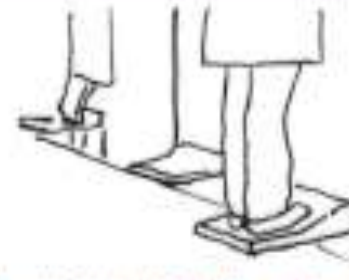
SOLUTIONS



Raise bins/use spring loaded inserts



Use height-adjustable tables/carts



Use height-adjustable work platforms



Tilt work up to reduce reaching



Use well-designed document holders

REPETITIVE MATERIAL HANDLING

HAZARDS



Repetitive lifting and carrying



Repetitive pushing/pulling



SOLUTIONS



Use well-designed hoist for repetitive handling



Use roller conveyors to reduce repetitive lifting/handling



Mechanize repetitive material handling where necessary



Use specially designed equipment to reduce repetitive handling/carrying

GENERAL SOLUTIONS FOR DIFFERENT REPETITIVE TASKS



Job rotation



Frequent breaks

CONTACT STRESS

HAZARDS



Tool digging into fingers/palm/hand



Sharp edges digging into wrists



Seat pan digging into back of the knee



Sharp edges digging into body

SOLUTIONS



Use tools with handles that extend past the palm



Select equipment, tools with rounded edges or provide padding



Provide good support for forearms



Adjust chair so feet are flat on the floor and there is space between seat and back of legs



USING KNEE/HAND AS HAMMER

HAZARDS



Using knee as hammer



Using hand as hammer

SOLUTIONS



Use a rubber mallet instead of hand for hammering



Use knee pads/padded gloves



Use a mechanical device to replace knee/hand hammering

VIBRATION HAZARDS



Hand-arm vibration



Whole-body vibration

SOLUTIONS



Use tools designed to reduce vibration



Use anti-vibration gloves



Use good anti-vibration seat suspensions



Keep roads/travel surfaces smooth

HOT/COLD HAZARDS



Hot temperatures



Cold temperatures

SOLUTIONS



Drink water to keep hydrated



Use local heat sources
for whole body, hands



Use handwarmers/gloves
to keep hands warm



Wear appropriate clothing



Take breaks - to cool down or warm up



What are the physical demands (summary)

One or more of the following:

- Duration/repetitiveness of the activity
- Weight of item handled
- Amount of force required
- Awkward grip
- Awkward/static posture
- Awkward movement
- Vibration/ impact
- Other

What are the possible contributing factors for this difficulty or possible areas for improvement?

One or more of the following:

- ask for help
- procedure compliance/work method
- work method
- type of materials handled
- maintenance of tools/equipment
- availability of tools/equipment
- design/quality of tools/equipment
- work area
- storage area
- actions of others
 - Is there something that other employees or community members are doing that is related to the difficulty?
- other

Are there any other details about the difficulties?
What body part is affected (if any)?

- Could be one of more of the following
 - Neck
 - Shoulder
 - Elbow
 - Wrist
 - Hand
 - Lower back
 - Hip
 - Knee
 - Ankle
 - Foot
 - Other

Are there any other details about the difficulties (*continued*)?

More details about...

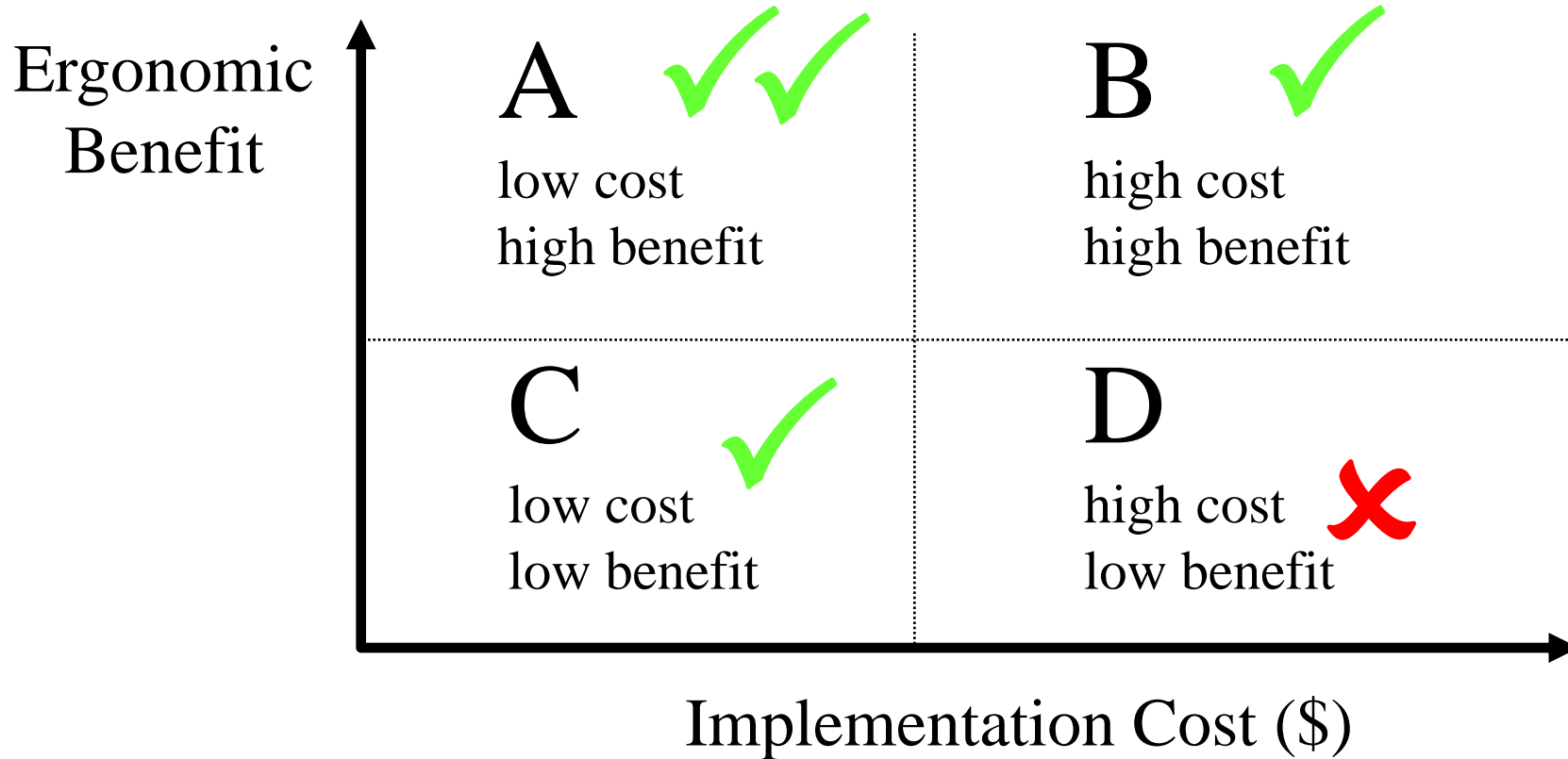
- Physical demands?
- Contributing factors?
- When does the difficulty happen?
 - Whenever the activity is performed?
 - Only under certain conditions?
- etc

What improvements could be considered?

Sources of ideas and assistance:

- Observing the activity
- Talking with employees who perform this activity
 - particularly the biggest and the smallest
- Health and Safety Officers
- Leadership Groups (CSBO)
- Joint Health and Safety Committee members or Health and Safety Representatives
- Equipment manufacturers and suppliers
- Trade associations
- Other institutions performing similar work
- [OHS](#)

Cost-benefit analysis of possible improvements



4.1) Should the employee be getting help with the activity?

4.1) Should the employee be getting help with the activity?

- If employees aren't asking for help when they should, what are the possible barriers to asking for/getting help? How could they be addressed?
 - “Would have taken too long.”
 - “No one around to ask for help.”
 - “Thought I could do it by myself.”
 - etc
- Should getting help be mandatory for specified difficult activities (e.g. lifting extremely awkward/heavy items)?
- Would improved communications help?

Sample questions:

- “It's really important that you ask for help when you think you need it.”
- “Could you help me understand why you didn't ask for help, so we can find a solution for the next time you need help?”

4.2) Procedure compliance / Work method (see Procedure Compliance Tool)

Procedure: What do they do?

Ask the employee to describe what they do when they experience the discomfort or difficulty.

Review this at the worksite with the equipment involved

Be careful about asking the employee to demonstrate, especially if they have been injured.

You may wish to simulate what they were doing, instead.

Based on their answers, **did they use the proper procedure and equipment?**

Sample question:

“So that I can help you with this, could you help me understand exactly what you do when you experience the discomfort?”



Is the proper procedure used?

If YES, skip this section (link below).

If NO,

What is the difference between the proper procedure and what the employee actually does/did?

Why did they do it that way?

Continue to ask why until you understand exactly why they did it that way (“root cause analysis”).

Sample question:

“The best way to do this job is by following the proper procedure. In case we need to make changes, can you help me understand why you didn’t use it this time?”

[<Skip this section>](#)



Why was the proper procedure & equipment not used

One of the following:

- 1) employee finds the proper procedure & equipment difficult to follow/use
- 2) employee forgot the proper procedure or had a momentary lapse in concentration/judgment
- 3) employee did not know the proper procedure
- 4) employee knows the proper procedure, does not find it difficult and chooses not to follow it entirely
 - They don't understand the BENEFIT of the doing the activity CORRECTLY
 - They don't understand the CONSEQUENCES of doing the activity INCORRECTLY
 - They have always done it incorrectly and have never experienced a negative consequence
 - Not everybody uses the proper procedure



Employee finds the proper procedure & equipment difficult to follow/use

Future steps to consider

- One on one coaching
- Can the procedure/equipment be made easier?
(review the **Activity Improvement** step)

Employee forgot the proper procedure or had a momentary lapse in concentration/judgment

Future steps to consider

- When mistakes happen
 - Help the employee learn from them
 - Avoid emotional outbursts, sarcasm
 - Try to avoid punishment for honest mistakes
- Regular reminders
- Signs/Postings
- Regular refresher training
- Keep procedure documents where they can be easily accessed by employees
- Can the procedure be made easier to remember? (review the **Activity Improvement** step)

Employee did not know the proper procedure

Future steps to consider

- Review the new employee orientation process
- Training

Employee knows the proper procedure, does not find it difficult and chooses not to follow it entirely

Future steps to consider

- Provide positive feedback when the proper procedure is observed
- Explain/show why it is important to follow the proper procedure
 - employee may not understand the benefit
 - If doing the activity the wrong way results in problems that are important but infrequent, give examples of the possible problems
 - employee may not have experienced the problem, yet!
- Enforce the proper procedure consistently to everyone
 - If there are exceptions, ensure that they are well understood and justifiable

Follow up steps

5) Evaluate any changes made to make sure they are working

6) Communicate lessons learned to other staff

5) Evaluate any changes made to make sure they are working

- Evaluate changes at a later date
 - Are they helping?
 - Any unexpected problems?
- Check in with the employee the day after changes were made.
- Depending on the outcome of this initial follow up, daily or weekly follow ups should be scheduled until the concern is resolved.
- Tool
- [Ergonomics Change Evaluation Tool \(PDF\)](#)
[\(DOC\)](#)



6) Communicate lessons learned to other staff

- Make others aware of lessons learned from this process, in order to reinforce the importance of using preventive measures.
 - Do not share the identity of the affected employee without getting approval from him/her first.
- Encourage early reporting of problems