

***Ergonomics - PDAs***



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# What is Ergonomics?

- Ergonomics can be defined as ***shaping workplace design to fit its workers for an optimum level of health and safety***

## Why Ergonomics?

- Everyday, Canadians are interacting with the equipment, tools and work environment, work methods & work organization in their workplaces and day to day lives.
- Research has shown that their poor design can have negative implications for Worker's Health and Safety, productivity and quality and as a result, businesses lose billions of dollars per year

# Why Ergonomics?

Aging workforce along with the demands on the employees to work harder (cut-backs and lay-offs along with longer hours, including overtime)

# What are Musculoskeletal Disorders (MSDs)?

MSDs are injuries and disorders of the musculoskeletal system. They may be caused or aggravated by various hazards or risk factors in the workplace.

The musculoskeletal system includes:

- Muscles, tendons and tendon sheathes
- Nerves
- Bursa
- Blood vessels
- Joint/spinal discs, and
- Ligaments

*MSDs do not include musculoskeletal injuries or disorders that are the direct result of a fall, struck by or against, caught in or on, violence, etc...*

## Work Related?

These can be work related because exposure to various risk factors present in the workplace may contribute to their development or aggravate a pre-existing condition

42% WSIB Lost time claims and costs

# Using a Physical Demands Analysis (PDA)

Technique to objectively measure the physical demands associated with a job

Evaluates **the job not the individual** performing the job

Describe the demands of a job

Integral for a return-to-work program (RTW)

## Why do you need a PDA?

### Prevention first !!

- Documentation and evaluation of the physical, cognitive and environmental demands of the essential and non-essential tasks of a job
- Objective tool for communicating clearly with workers, WSIB and health care professionals to understand the physical demands providing accurate RTW recommendations
- Can be used as a passive risk assessment



## Who completes a PDA

Should be conducted jointly by a worker and employer representative that has knowledge is completing PDA's (i.e. training course)

If being developed by an external person, then they should be reviewed and signed off by a worker and employer representative

## Tools you need for a PDA

Below is a list of some basic tools you will need to develop a PDA

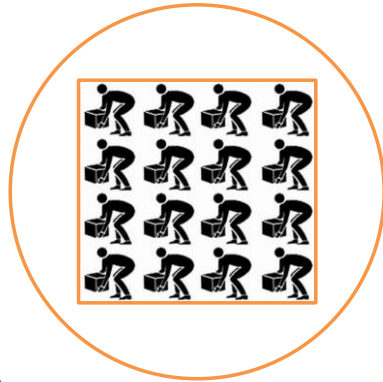
- Weight scale
- Tape measure
- Stop watch
- Camera
- Template/Form

# MSD Primary Hazards



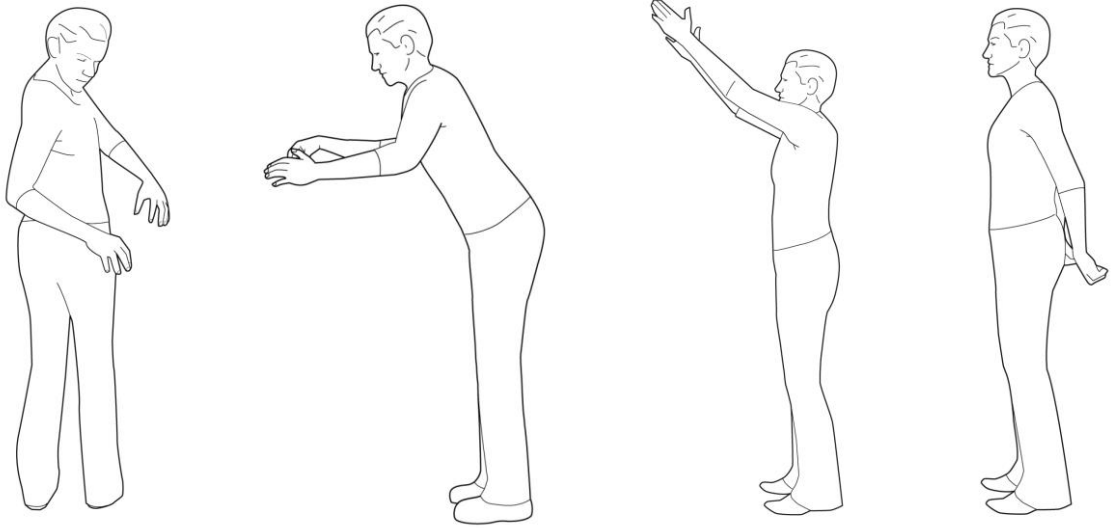
**Force**

**Posture**

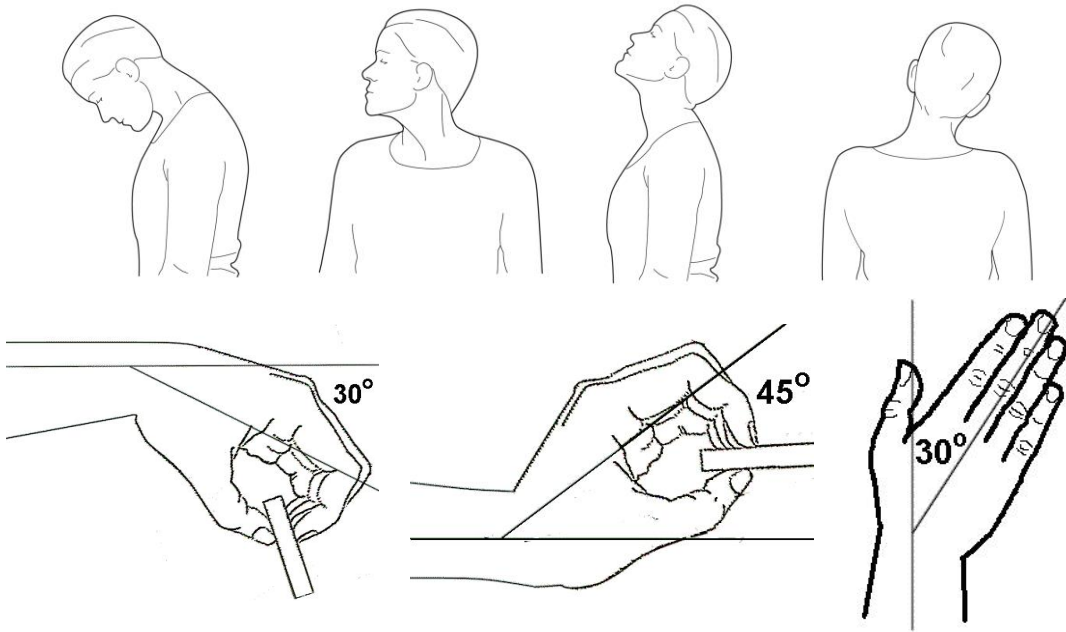


**Repetition**

# MSD Hazards - Posture



# MSD Hazards - Posture



# Ergonomic Interventions

- Develop a Safe and Early Return to Work Program
- Include workers for solutions to MSD challenges (PE)
- Train all workers in the use of the control measures
- Move away from the band-aide solutions – get to the root cause = RA
- Evaluate control measures to determine their effectiveness to eliminate or minimize the area of concern. If the concern has not been effectively controlled, re-examine the task

Ergonomics is just a part of your overall health and safety program



# Contact Information

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