



UNIVERSITY
OF MANITOBA

Physical Plant

A COR™ Certified Workplace

Musculoskeletal Injuries Workshop

Brian Westbrook
Instructor

Workshop #000119

September 2010



UNIVERSITY
OF MANITOBA

Physical Plant

A COR™ Certified Workplace

Competency Check

Contact the Training and Safety Coordinator (474-7460) to write the Competency Check after completing this online workshop.



References

- WS&H Act (Sections) & Regulation (Part 8)
- Construction Safety Association of Manitoba
“Back Care” Education Program #21
- U of M EHSO, Occupational Health
Coordinator





UNIVERSITY
OF MANITOBA

Physical Plant

A COR™ Certified Workplace

Objective

To offer you the information needed to be competent in your understanding of Musculoskeletal Injuries (MSI's).



Workshop content

- Objective
- MSI's are very common
- Regulation Part 8
- Causes of MSI
- Non-work related causes



Workshop content

- Work related causes
- Workplace risk factors
- Prevention
- Your best defense
- Good posture is important



Workshop content

- Basic lifting technique
- Material Handling
- Do the right thing for yourself
- Competency check



MSI's are very common

- MSI's (sprains and strains) is a very common complaint. In fact at least 80% of Canadians experience this type of injury at some time in their lives.
- HOW ABOUT YOU?





MSI's are very common

- Nearly 25% of the lost-time injuries in construction are related to strains and sprains.
- More than half of these injuries result from lifting excessive weight or lifting incorrectly.





MSI's are very common

- Many of Physical Plant reported Incidents are a result of MSI's (sprains and strains).
- Sprains and strains represent about **20%** of Physical Plant's total **incidents** on any given Month (2 out of every 10).





Regulation Part 8 says...

- When an employer is aware (or ought to be aware) that a work activity creates a risk of MSI, the supervisor must:
 - Ensure the risk is assessed,
 - If required, put in control measures,
 - Monitor the effectiveness of the control measures.





Regulation Part 8 says...

- The supervisor must:
 - Inform the worker of the risk and of the signs and common symptoms of any MSI associated with the worker's work,
 - Train the worker on any control measures.





Regulation Part 8 says...

- The worker must:
 - Complete a risk assessment. Physical Plant requires it to be done before the job starts and at the job site.
 - Participate in the training of any MSI control measures.





UNIVERSITY
OF MANITOBA

Physical Plant

A COR™ Certified Workplace

Causes of an MSI

Wear and tear or overexertion



Non-work related causes

- Your:
 - Weight,
 - Fitness,
 - Flexibility,
 - Family historyare factors that contribute to a MSI.



Work related causes

- Posture,
- Repetition,
- Force.



Workplace risk factors

- Static postures,
- Repetitive motions,
- Working overhead,
- Lifting and carrying,
- Twisting
- Working in awkward positions.



Prevention

- To prevent injuries, three factors are necessary:
 - Proper posture,
 - Correct lifting,
 - Regular exercise.



UNIVERSITY
OF MANITOBA

Physical Plant

A COR™ Certified Workplace

Your best defense

Complete a pre-job *risk or hazard assessment* at the worksite.



Your best defense

- Spend a moment or two doing warm-up exercises*. Posters illustrating various exercises have been distributed to your Work Unit.

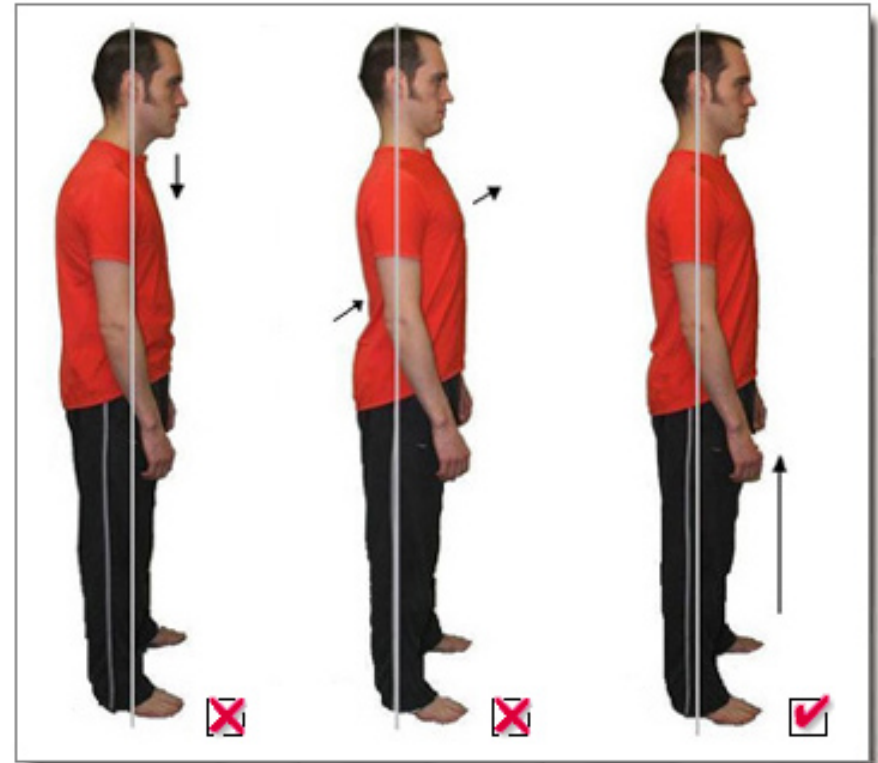
*This is particularly helpful first thing on a cold morning.





Good posture is important

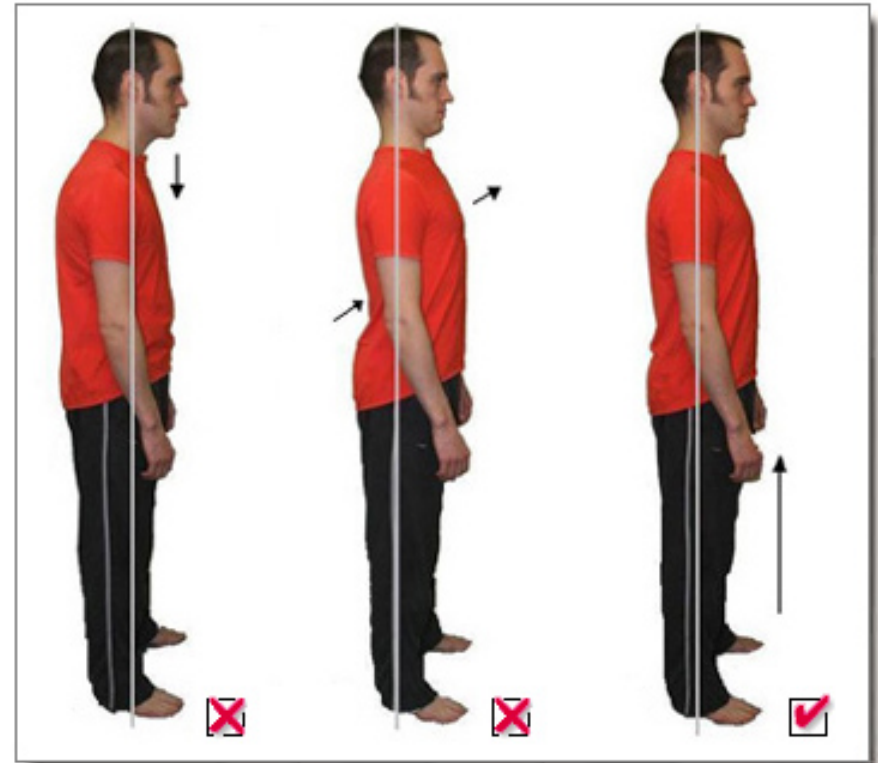
- Protects injury prone structures,
- Minimizes disc pressure.





Good posture is important

- Allows for efficient body use,
- It is the position of least stress on your muscles and skeletal system which reduces the wear and tear on your spine.





Basic lifting technique

- Assess the lift,
- Have your feet slightly apart—even with your shoulders,
- Hold the load close to your body.





Basic lifting technique

- Don't twist while lifting—move your feet instead
- Lift in a smooth and controlled manner.

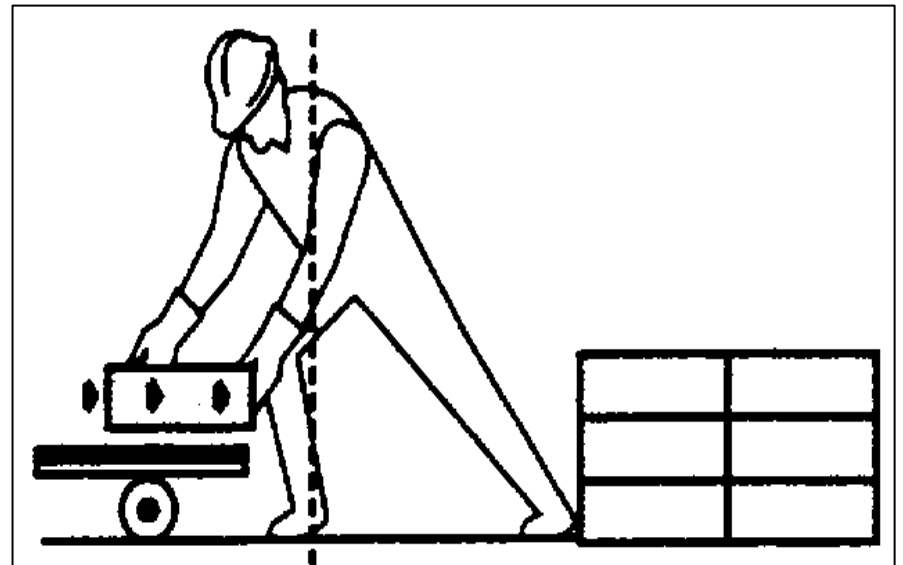




Material handling

Step 1:

- PULL the material towards you.

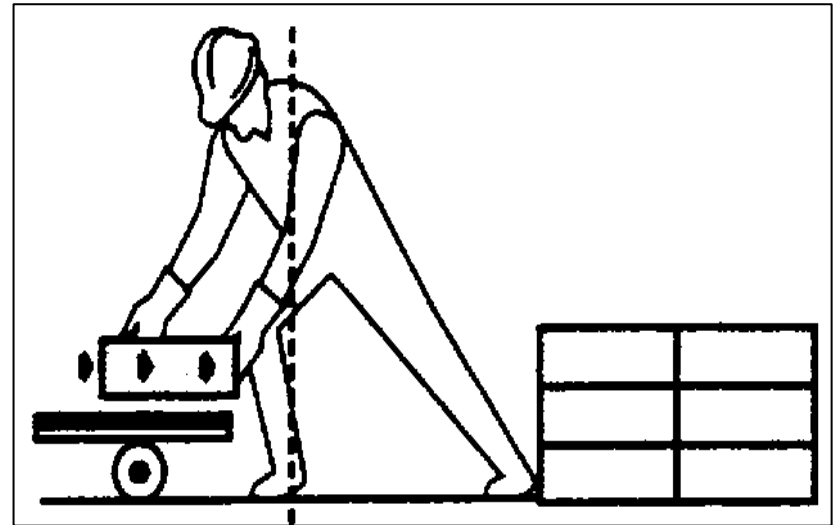




Material handling

Step 2:

- **TRANSFER** your weight to the left side (nearest the load).

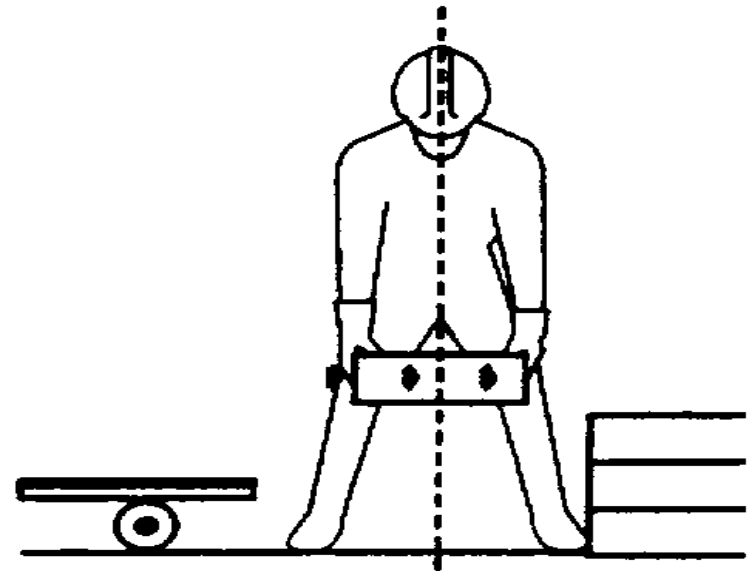




Material handling

Step 3:

- LIFT only to the required level.

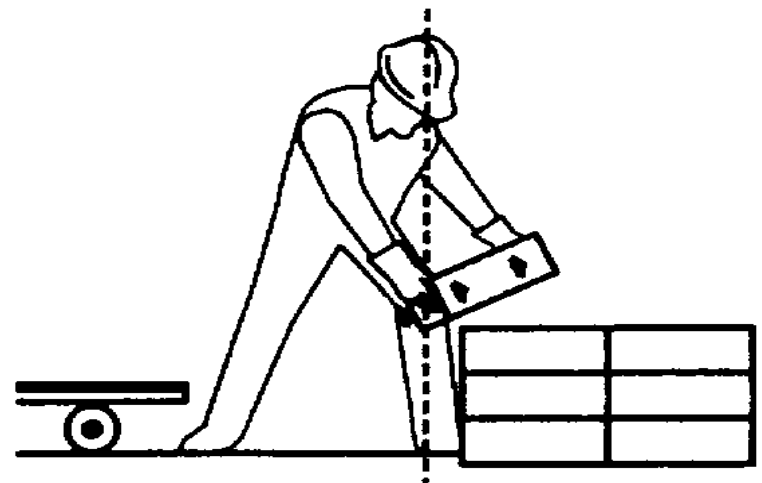




Material handling

Step 4:

- SHIFT weight to your other leg.
- Caution:** Do not twist your body.

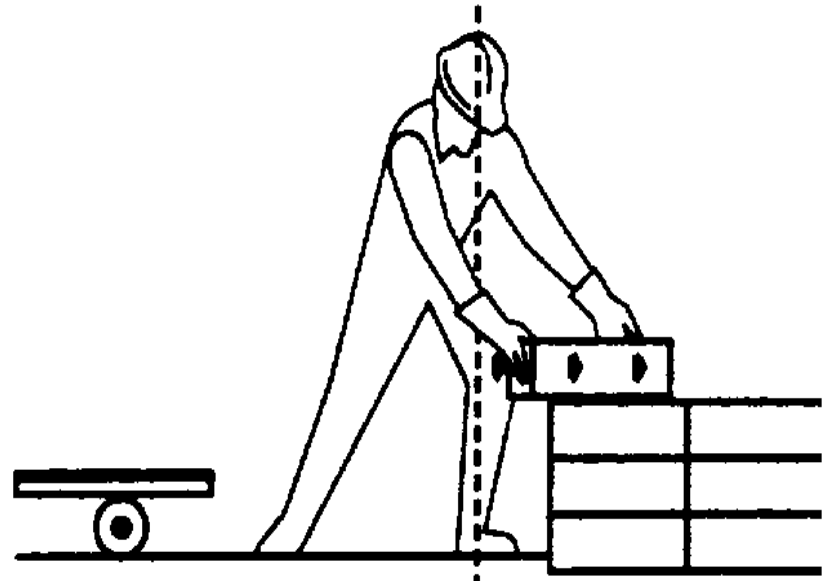




Material handling

Step 5:

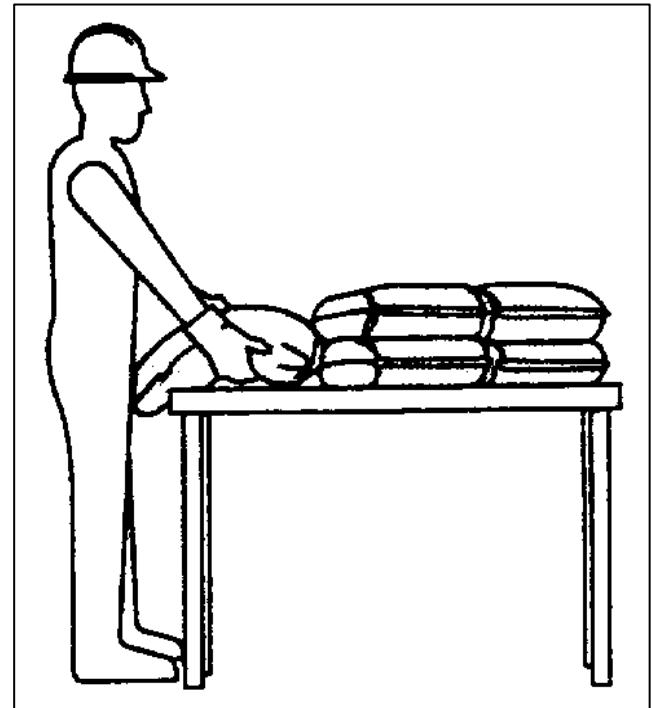
- PUSH material into position.





Material handling

- Store and work with materials at waist height whenever possible.





Do the right thing for yourself

- Reduce the weight of the load.
- Get help, use the “team” approach.
- Store materials at or above hip height—this reduces the need for bending.
- Use carts, ropes, forklifts, and other tools.
- Minimize the distance needed to carry items—plan your storage and movements.



Do the right thing for yourself

- Transfer the weight of the load to stronger parts of your body using handgrips, straps, or belts.
- Reduce twisting of your body: Keep loads in front of you; turn by moving your feet, not your body.
- Don't swing and throw heavy loads.
- Minimize bending to lift or shift a load.



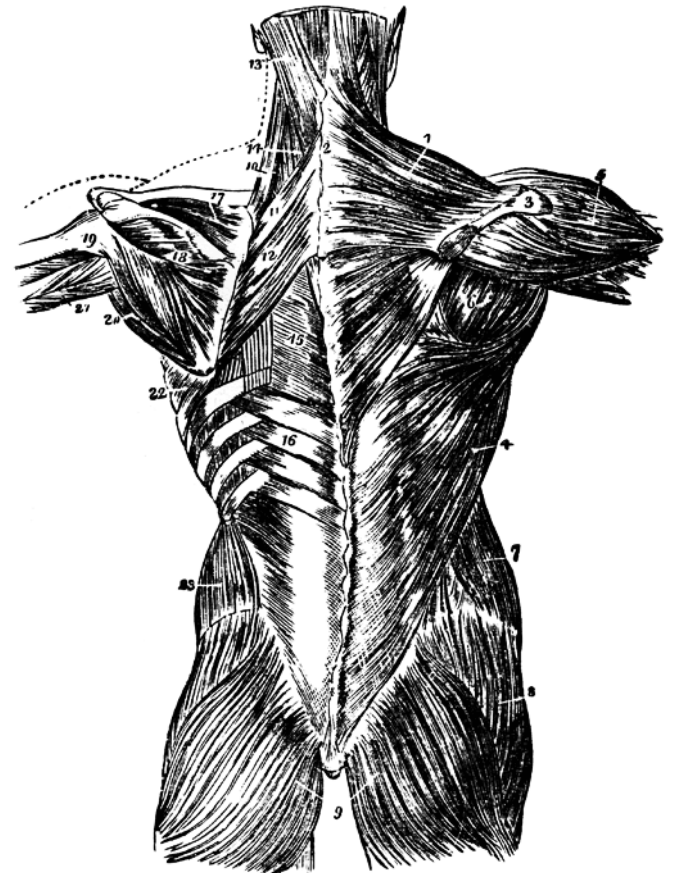
UNIVERSITY
OF MANITOBA

Physical Plant

A COR™ Certified Workplace

Remember...

You only have one back,
so be kind to it.





UNIVERSITY
OF MANITOBA

Physical Plant

A COR™ Certified Workplace

Competency Check

