

## MODULE 4 – Manual Materials Handling Risk Control – Preventing MSI at Work

MSI are soft tissue injuries caused or made worse by work.

Manual Material Handling involves lifting, lowering, pushing, pulling or carrying.

### What strategies reduce MSI risk during Manual Material Handling Tasks?

- Minimize Force – Easier is better
  - Read the box or test the load – know how heavy it is before you pick it up
  - Divide load into smaller portions; make more trips
  - Use equipment – carts, pallet jacks, hand trucks, etc.
  - Ask for help if heavy or awkward
- Minimize Awkward Postures – Avoid reaching, bending or twisting
  - Use the right equipment for the task
  - Adjust working height for better posture
  - Load position near waist height and close to the body
  - Power grip on object (use handles and shape of the object)
- Remove obstacles along the path
- Reduce the distance moved
- Reduce the duration of manual handling activities
- Use good body mechanics and lifting technique

### What is Good Body Mechanics or Good Technique?

- Lift, push or pull from a position of strength - protect neutral back, shoulder, and wrist postures
- Minimize reaching, bending or twisting
  - Adjust your height (step, platform) or the load height (cart, pallet lifter)
  - Put an object down at a height that is good for the next lift (cart, table, shelf)
  - Tilt or pull items close prior to lifting
  - Move your feet rather than twist your body
- Lift/Lower – good body mechanics
  - Get square to and close to the load
  - Tighten abdominal muscles before lifting (still able to breath/talk)
  - Stick your bum out and keep your head up (use leg muscles) for lifts below mid thigh
  - Move smoothly at a controlled pace (avoid rapid, jerky movements)
- Push/Pull – good body mechanics
  - Get square to the direction of push or pull
  - Tighten abdominal muscles (still able to breath/talk)
  - Keep arms bent at the elbow (if the load stops suddenly, your arms can absorb shock)
  - Use your body weight – lean slightly into the direction of travel but stay upright
  - Don't move any faster than you can counter if you need to stop

### Discussion or Follow-up

1. What are the Manual Materials Handling activities in the work that you will be doing today?
2. What is your plan to reduce your risk of MSI when performing those tasks?
3. Who do you talk to if you have concerns about MSI or MSI risk?