MATERIALS HANDLING

Materials handling work contributes to a large percentage of the over half a million cases of musculoskeletal disorders reported annually in the United States. Musculoskeletal disorders often involve strains and sprains to the lower back, shoulders, and upper limbs.

Scientific evidence shows that effective ergonomic interventions can lower the physical demands of materials handling work tasks, thereby lowering the incidence and severity of the musculoskeletal injuries they can cause.

Proper Lifting Techniques:
Lifting is strenuous – it requires proper training and technique. Lifting with your large, strong leg muscles instead of the small muscles of the back, you can prevent back injuries and reduce low back pain.

There are five steps to follow when lifting an object:

- **Get close to the load** – Get as close to the load as possible – as if you’re hugging the object. Having the object close to your body puts less force on your lower back.

- **Maintain your curves** – Keep yourself in an upright position while squatting to pick up.

- **Tighten your stomach muscles** – Tightening the stomach helps support the spine. Don’t hold your breath while tightening the muscles.

- **Lift with your legs** – Your legs are the strongest muscles in your body – so you use them.

- **Pivot - don’t twist** – Turn with your feet, not your back. It isn’t build for twisting from side to side.
Back Safety Tips: Protect Yourself

Injuries can be reduced by planning, changing the work process, and by training workers and supervisors.

**Plan**
- Warm-up exercises before work can help reduce muscle injuries.
- Cut down on carrying. Have materials delivered close to where they will be used.
- Try to store materials at waist height.
- Raise your work to waist level.
- Make sure floors and walkways are clear and dry. Slips, trips and falls can result in a back injury.
- Take rest breaks. When you are tired, you are at greater risk for a possible injury.

**Get Help**
- Use carts, dollies, forklifts, and hoists to move materials — not your back.
- Use carrying tools with handles to get a good grip on wallboard or other odd-shaped loads.
- If materials weigh more than about 50 pounds, do not lift them by yourself. Get help from another worker or use a cart.

**Move Carefully**
- When lifting or carrying materials, keep the load as close to your body as you can.
- Try not to twist, when lifting and lowering materials. Turn your whole body instead.
- Lift and lower materials in a smooth steady way. Try not to jerk the lift.
- When you pick up materials off the ground:
  - Try supporting yourself by leaning on something while lifting.
  - Don't bend over; instead, kneel on one knee and pull the load up on to your knee before standing.