

# TOOLBOX TALK



## DISCUSSION TOPIC: MUSCULOSKELETAL INJURIES AND PROPER BODY MECHANICS

### DANGERS OF MUSCULOSKELETAL INJURIES

Musculoskeletal injuries occur in the soft tissues of your body like the nerves, tendons, muscles, ligaments, and joints, and develop slowly over time.

Musculoskeletal disorders (MSDs) may not seem very serious when symptoms first appear. They can start with minor discomfort in the early stages with symptoms that go away after a break, or at night when you are not at work. But as you return to the same activities, the symptoms also return. Over time symptoms increase in intensity and eventually the body does not recover, even after rest.

Recognizing potential risk factors in work tasks that can lead to these symptoms is the first step to eliminating them.

Work can be made more comfortable and safer by using ergonomics. Ergonomics focuses on how people interact with their workspace or working conditions, and how to make that interaction as safe and efficient as possible for each worker.

### RISK FACTORS

Common risks for ergonomic hazards include:

**Repetition** – involves doing the same task repeatedly, using the same muscles over and over.

**High Force** – using extra muscles during activities such as heavy lifting, pushing items, or gripping tools.

**Awkward Postures** – working with your body bent, twisted, extended, or flexed rather than in a neutral position.

**Contact Stress** – when pressure from an object is pushed on soft body tissues (i.e., tool handle).

**Hand-Arm Vibration** – vibrations that enter the body from power tools or equipment.

Any of these hazards performed over long periods of time can cause problems, and activities with more than one ergonomic risk factor can increase physical discomfort even more.

### PREVENTION

#### **Lifting heavy objects:**

- Use equipment (dollies, carts, hoists, motorized buggies) and other mechanical devices. Don't forget that other workers can help too.
- Break loads into smaller units; carry a 25lb load twice instead of a 100lb load once.
- Prepare by stretching and warming up before performing lifting tasks. Label materials and use proper lifting techniques.
- Slowly lift by straightening your knees (not your back). Keep your back straight, and don't twist as you lift.
- Hold the load as close to your body as possible, at the level of your belly button.
- Use your feet to change direction, taking small steps.

#### **Ground level work:**

- Bring the work up to your neutral posture by using tables or stands and keep materials you use often at waist height.
- When you perform low-level work, change your position often (kneel, crouch, squat, or sit).
- If you need to kneel, make sure you use high quality knee pads.
- Use equipment with longer handles to minimize low level postures (bending over) if possible.

#### **Overhead Work**

- Use equipment that brings you closer to your work. This will minimize how far you move away from the neutral posture.