



Safety Talk: Musculoskeletal Disorders



Musculoskeletal disorders (MSD) are injuries of the muscles, nerves, tendons, ligaments, joints, cartilage, blood vessels, or spinal discs. They result from overuse of joints and connective tissues.

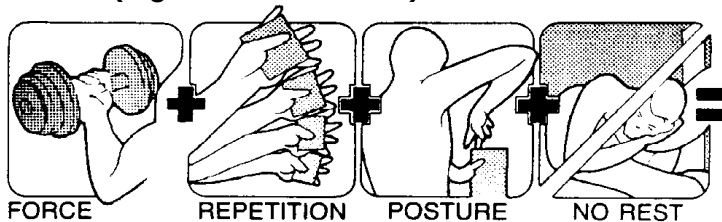
Tendonitis, tenosynovitis, carpal tunnel syndrome, and back pain are common examples of MSD's.

EARLY DIAGNOSIS IS CRITICAL FOR SUCCESSFUL TREATMENT OF INJURIES

Recognize the symptoms of MSD's:

- Swelling
- Numbness
- Tingling or burning sensation
- Pain, stiffness, or general discomfort
- Insomnia due to any of the symptoms above

Risk Factors for MSD's (ergonomic risk factors):



- **Excessive force** – applying pressure, gripping, or lifting.
- **Repetition** – the number of repetitions of a single motion.
- **Awkward postures** – deviations from neutral postures.
- **Lack of rest** – each of the risk factors above cause "micro-traumas". The body recovers from micro-traumas during rest periods to prevent MSD's.
- Any combination of these risk factors **significantly increases the risk** of MSD.
- **Higher frequencies** and/or **longer durations** also increase the risk of MSD.

ALL MUSCULOSKELTAL DISORDERS ARE PREVENTABLE

Adjust your job to prevent MSD's:

- Purchase tools that can be used while employing neutral postures.
- Use the right tool for the job – e.g. use a power tool if you cannot apply enough force with a hand tool.
- Use material-handling aids for lifting, holding, or transporting heavy or bulky objects.
- Don't overlook ergonomics in a Job Safety Analysis (JSA). Consider awkward postures and the force applied in each step of the job.
- **If you feel soreness or discomfort when doing an activity or using a tool – there is probably a better method or tool.**

Work Practices to Prevent MSD's

1. Recognize and report symptoms of MSD's.
2. Lightly stretch to warm-up before performing rigorous activities.
3. Take short rest breaks and stay hydrated.
4. Switch between hands when using hand tools.
5. Switch between postures.
6. Perform a variety of motions instead of a repeating a single motion.
7. Ask a coworker for help when needed.
8. Don't rush through rigorous activities.
9. Perform work between your waist- and chest-level.
10. Use proper lifting technique.

Ergonomics and Back Safety Training:

Both are offered online through chalk.uchicago.edu