



Strains and Sprains: An Ounce of Prevention

According to workers' compensation data, sprains and strains are one of the leading causes of workplace injuries. The good news is that preventing them is a simple matter of identifying risk factors and systematically implementing control measures.



Ergonomic Risk Factors

- **High force loads** on the human body increase muscle effort, which can lead to fatigue and **musculoskeletal disorders (MSDs)**.
- Work tasks are **repetitive in nature** and controlled by production targets and work processes.
- **Awkward posture** places excessive force on joints and can overload muscles and tendons.



Individual Risk Factors

- **Environmental factors**, such as slip, trip, and fall hazards, increase risk of a sudden, acute soft tissue injury.
- Employees who use **poor work practices, body mechanics, and lifting techniques** are introducing unnecessary risk factors that contribute to MSDs.
- Employees who smoke, drink excessively, are obese, or exhibit other **poor health habits** put themselves at risk.
- Employees who don't get **adequate rest and recovery time** put themselves at higher risk.



Control Measures

- Employees should be **trained on all aspects of human performance**, including ergonomics, MSD prevention principles, and individual health and wellness.
- **Eliminate or reduce awkward postures** with ergonomic modifications that maintain joint range of motion to accomplish work tasks.
- Conduct a **job hazard analysis** by breaking down each job to identify hazards associated with each task and eliminate or reduce them.
- Practice **administrative controls**, such as job rotation and counteractive stretch breaks.
- Practice **early intervention**, which is a proactive strategy designed to discover early warning signs of MSDs to prevent them from becoming an injury.



Treatment of Sprains and Strains

- Doctors routinely prescribe the **RICE treatment (rest, ice, compression, and elevation)** for the injured body part immediately following the injury.
- Most sprains and strains heal in **two or three weeks**.

Additional Resources

- [TDI Manual Material Handling, An Ergonomic Approach](#)
- [TMLIRP Online Learning Center – Back Injuries](#)
- [TMLIPR Loss Prevention Stretch and Flex to Prevent Injuries TIPS](#)
- [TMLIRP Media Library:](#)
 - Strains and Sprains: A Public Concern, Disc 312
 - Preventing Injury Through Body Mechanics, Ergonomics, and Physical Fitness, Disc 481