Ergonomic studies, is the science of a full range of tasks including, but not limited to, lifting, holding, pushing, walking and reaching. Ergonomic problems result from technological changes such as increased assembly line speeds, adding specialized tasks and increased repetition. Any of those conditions can cause ergonomic hazards like excessive vibration and noise, eye strain, repetitive motion and heavy lifting problems.

Ergonomic injuries are often described by the term "musculoskeletal disorders" or "MSDs." This is the term of art in scientific literature that refers collectively to a group of injuries and illnesses that affect the musculoskeletal system.

Musculoskeletal Disorders can include:
• Carpal tunnel syndrome
• Tendinitis
• Rotator cuff injuries (affects the shoulder)
• Epicondylitis (affects the elbow)
• Trigger finger
• Muscle strains and low back injuries

Good work practice includes continually identifying the most hazardous tasks and implementing engineering and work practice controls to help reduce or prevent injuries in those tasks.

Note the following key points in this lesson:
• Ergonomic injuries are often described by the term "musculoskeletal disorders" or "MSDs."
• An employer still has an obligation under the General Duty Clause, Section 5(a)(1) to keep the workplace free from recognized serious hazards, including ergonomic hazards.
• Regardless of how good your working posture is, working in the same posture or sitting still for prolonged periods is not healthy. You should change your working position frequently throughout the day.
• Assessment of work tasks involves an examination of duration, frequency, and magnitude of exposure to ergonomic stressors such as force, repetition, awkward postures, vibration and contact stress to determine if employees are at risk of pain or injury.
• A training program, designed and implemented by qualified persons, should be in place to provide continual education and training about ergonomic hazards and controls to managers, supervisors and all healthcare providers, including "new employee" orientation.
• Store and place materials that need to be manually lifted and transported at power zone height, about mid-thigh to mid-chest.
• Environmental factors such as heat, cold and poor lighting can contribute just as much to ergonomic problems in the workplace.

Remember:
Work related MSDs are among the most frequently reported causes of lost or restricted work time. According to the Bureau of Labor Statistics (BLS) in 2013, MSD cases accounted for 33% of all worker injury and illness cases.