Ergonomics
What is Ergonomics

• Ergonomics is the science of obtaining a correct match between the human body, work-related tasks, and work tools.

• The goal of ergonomics is to reduce stress and eliminate injuries and disorders associated with the overuse of muscles, bad posture, and repeated tasks. This is accomplished by designing tasks, work spaces, controls, displays, tools, lighting, and equipment to fit the employee’s physical capabilities and limitations.
How Much Do Injuries Cost Us?

- U.S. Bureau of Labor Statistics reports 650,000 work-related musculoskeletal disorders (WRMSDs), resulting in costs to employers of over 20 billion dollars. These costs include Worker's Compensation and medical expenses, the latter of which are increasing 2.5 times faster than benefit costs.
What Injury Can I Identify?

• Employee identification is key to bringing issues forward in the workplace.
• Management can then brainstorm ways to minimize injuries if they know they exist.
How Does an Injury Happen

• Musculoskeletal injuries happen because of repetitive motions for prolong periods of time, bad posture, straining neck & back muscles, etc.
Benefits

• By using engineering controls workers have made a huge impact on ergonomic based injuries. Benefits include:
  • Greater moral at work
  • Less aches & pains during & after work
  • Insurance rates declining
  • Etc.
Neck

• Consistently looking down at a task
• Sitting a desk or a computer & placing your monitor in an uncomfortable position
• Sitting all day in an uncomfortable chair.

• All of these can cause neck muscles to cramp, strain, or get damaged over prolong period of motion.
Back

• Bad posture
• Lifting incorrectly or twisting while lifting
• Body weight
• Continuously lifting heavy items all day.

• All of these are contributing factors in back pain.
Hands & Wrists

• Typing on a computer for extended periods of time
• Lifting objects in an uncomfortable position
• Continual wrist movement.

• Are all factors in hand & wrist injuries.
Legs, Knees, & Ankles

• Heavy lifting
• Constantly bending down
• Continuous climbing on uneven surfaces.

• Are all contributing factors in leg, knee, & ankle injuries and strains.
Get Involved, Share your Story

• Ergonomics is a very hot topic at work these days, however is often overlooked because identifying the work tasks that contribute to these injuries are usually not shared with upper management.

• Sometimes there are programs which address ergonomics, getting involved and sharing you experiences can make huge changes.
Is There a Better Way?

• Engineering controls:
  • Hoisting systems
  • Conveyer belt systems
  • Any system which allows the worker to eliminate repetitive, heavy, or awkward movements.

• Systems like these allow the worker to focus on the task and not the movement, reducing strains and injuries.
Stretching

• Daily stretching is a great way to help reduce the potential for Musculoskeletal injuries.

• Sometimes companies will have a stretching program already in place.
Be Safe