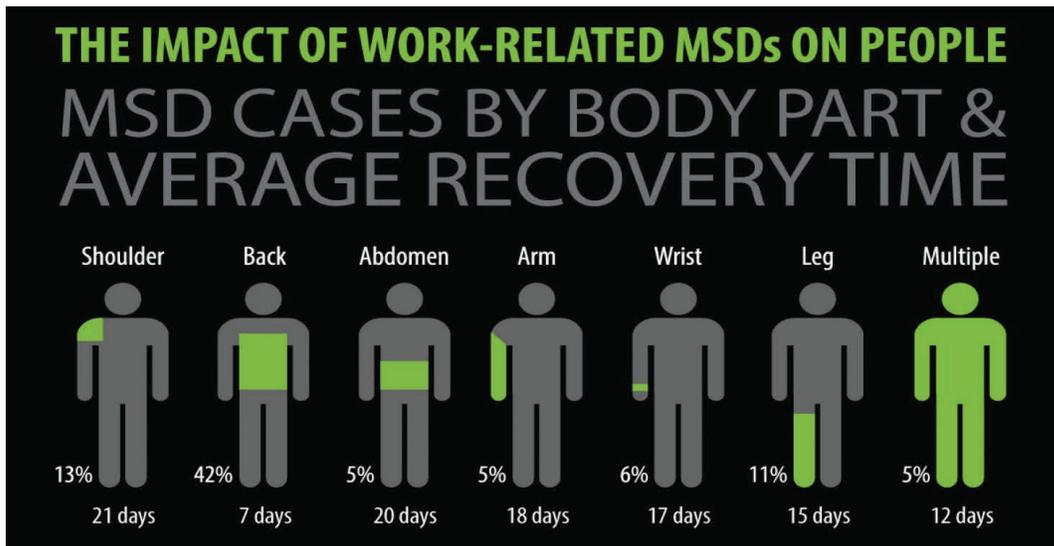


# ERGONOMICS

- ◆ The Bureau of Labor Statistics says that in 2011 there were 387,820 MSD (Musculoskeletal Disorders) cases that accounted for 33% of all worker injury and illness cases that year.
- ◆ One dollar of every three dollars of workers' compensation costs is spent on MSD injuries. Employers pay \$12-20 billion per year in Workers' Compensation cost for lost workdays.
- ◆ The average upper extremity MSD cost is \$8,070 compared to \$4,075 average cost of all other work related injuries.



**Q:** What is ergonomics?

**A:** The science of adapting the job to the individual. Ergonomics is making sure that individuals are doing their job with the least amount of discomfort and physical stress.

**Q:** What area of the body is affected by physical stress?

**A:** Physical stresses can be in the joints, muscles, nerves, tendons, and bones.

**Q:** What tasks can lead to physical stress?

**A:**

- ◆ Repetitive motion or doing the same thing over and over for a long period of time (i.e., typing, using scissors, turning a screwdriver, bending and scooping).
- ◆ Tasks that involve vibration (i.e., using power tools or equipment that give off vibration—drills and floor buffers).
- ◆ Excessive force (i.e., pushing/pulling heavy objects, lifting heavy objects, hammering, anything that involves using most of your strength).
- ◆ Working in an awkward position (i.e., holding a phone between your ear and shoulder, squatting for a long time, being in a small space, bending over, working with arms overhead).



~All of these can lead to an ergonomic disorder~



**Q:** What is an ergonomic disorder?

**A:**

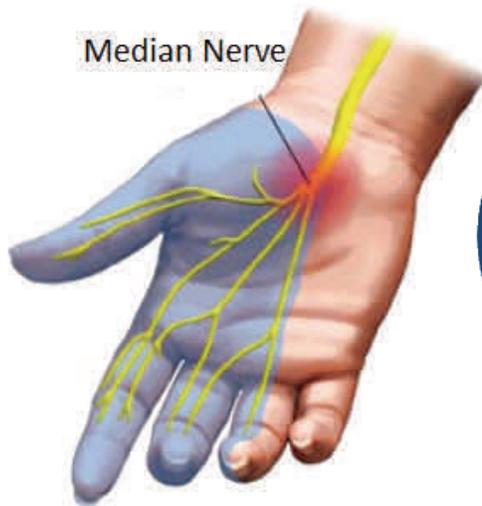
Cumulative Trauma Disorders (CTDs) and Repetitive Strain Injuries (RSIs) are injuries that are accumulated over time due to repetitive motion, this would not be caused by a single movement performed one-time. These injuries cause damage to the musculoskeletal system and are categorized as Musculoskeletal Disorders (MSDs).

**Q:** What are some specific Ergonomic disorders?

**A:**

Some of the most common CTDs and RSIs are carpal tunnel syndrome, rotator cuff syndrome, golfer's elbow and tennis elbow.





Median Nerve

## CARPAL TUNNEL

### DEFINITION

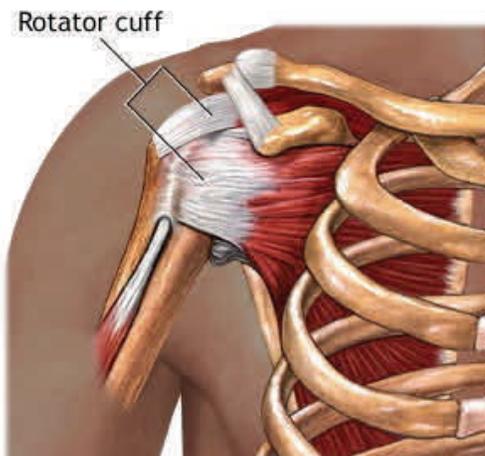
- Swelling of the median nerve inside the carpal tunnel of the wrist.
- This occurs when inflammation increases pressure on the median nerve.

### SYMPTOMS

- Numbness
- Tingling or pain in the hand or forearm.

### PREVENTION

- Do not work for long periods of time.
- Take breaks and stretch your wrist.
- Use of proper body ergonomics when performing a task.
- Use of ergonomic equipment may help.



Rotator cuff

## ROTATOR CUFF SYNDROME

### DEFINITION

- Inflammation of the shoulder tendons that rotate the arm inward and outward.

### SYMPTOMS

- Shoulder aches and pain.
- Pain when raising the arm out to the side or in front of the body.

### PREVENTION

- Stretch and keep tendons flexible
- Do not lift objects that are too heavy over your head.
- When working overhead, take frequent breaks.

