

Weekly Safety Meeting

Your Safety Is Our Business®

Volume 2, Issue 15

April 13th, 2015

Ergonomics

Ergonomics literally means "the rules of human strength." Engineers interested in the design of work environments originated the word in the 1950s. Today, the purpose of ergonomics in the workplace is to create a better match between workers, the work they perform, and the equipment they use. A good match increases worker productivity and reduces ergonomic injuries.

According to the Bureau of Labor Statistics, 34% of all lost-workday injuries and illnesses are work-related musculoskeletal disorders (WMSDs). WMSDs are a result of a bad match between the worker, the work they perform and the equipment they use. More common names for WMSDs include repetitive stress injuries, cumulative trauma disorders, tennis elbow, white finger, and the most common of all, carpal tunnel syndrome.

Ergonomics is the applied science of equipment design and arrangement, intended to maximize productivity by reducing operator fatigue and discomfort. Injuries related to ergonomics are those caused by over-use, impact, vibration, repetition, or forceful exertion. Largely injuries of the body's musculoskeletal system, these injuries include carpal tunnel syndrome, bursitis, tenosynovitis, tendinitis and others. These problems affect the muscles, ligaments, and tendons as well as the nerves and blood vessels.

Nearly every type of work or occupation has the potential for causing WMSDs. To prevent these injuries, it is important to understand the factors that contribute to them. Ergonomic factors refer to workplace conditions that pose the risk of injury to the musculoskeletal system of the worker.

Factors that contribute to the development of WMSDs include:

- Force the strength to perform a task;
- Repetition the frequency or number of times a task is performed during a shift;
- Posture positioning of the body to perform a task;
- Vibration this might come from overuse of power hand tools;
- Temperature extreme temperatures are more harmful to the body;
- Duration the amount of time in a workday spent performing work tasks; and
- Non-work related issues health, lifestyle, hobbies, and sports may add to the ergonomic risk factors.

Symptoms of these injuries are:

- Painful joints;
- Pain, tingling or numbness in hands or feet;
- Pain in wrists, shoulders, forearms, knees;
- · Back or neck pain;
- Fingers or toes turning white;
- Shooting or stabbing pains in arms or legs;
- Swelling or inflammation;



- Stiffness;
- Weakness or clumsiness in hands;
- Burning sensations; and
- Heaviness

Reducing WMSDs and/or the severity of WMSDs include:

- Reduce repetition or duration when possible--job rotation can help.
- Understand what is adjustable at your work site.
- Report work-related pain and discomfort and, when necessary, get a medical evaluation.
- Try new work methods and tools.
- Give suggestions for ergonomic job improvements.
- Exercise and maintain a healthy lifestyle.
- Use good ergonomic principles at home as well as work.
- Keep your work area organized and the area as clean as possible.

It is important to remember to observe all work tasks associated with a job, because each task may have a risk factor. WMSDs can be associated with a combination of risk factors from multiple tasks.

Report Early Symptoms: Repetitive motion injuries are a growing concern in the workplace. Anyone who experiences numbness, tingling, or pain in the hands, arms or neck should seek the advice of a supervisor. Changes in workstations and equipment can often alleviate these problems before they become chronic and medical attention should be sought if the problem persists. Following this simple advice can help eliminate physical stress and keep employees feeling good all day.

Awkward Positions...Unsafe Conditions!!



Safety Meeting Sign-In Sheet

Supervisor:	Subject:
Location:	Date:
Conducted By:	Trainer Signature:

Signature	Comments / Safety Concerns / Training Requests
	Signature