

Ergonomics

What is ergonomics?

Ergonomics is the science of fitting the job to the worker to avoid injuries and improve health, safety, and comfort. You may be familiar with injuries such as Carpal Tunnel Syndrome, Tendonitis, or back strain. These injuries are known as Musculoskeletal Disorders (MSDs) and are due to repeated trauma to the body's musculoskeletal system (muscles, ligaments, tendons, joints, bones) and nervous system. MSDs occur slowly over time and shouldn't be confused with traumatic injuries like stubbing your toe or cutting a finger. In fact, work-related Musculoskeletal Disorders (WMSDs) often occur when the job does not match the worker's abilities. Physical characteristics of the job such as force requirements (high hand forces or heavy, frequent or awkward lifting), awkward or static postures, vibration exposure, repetition, compression, and duration can place a worker at risk of injury. Other workplace factors such as extreme temperature, stress on the job or inadequate recovery time can also contribute to WMSD development. Lastly, don't forget that personal factors such as age, obesity, and smoking can also affect the risk of injury.

The risk of WMSDs can frequently be reduced by redesigning the workplace to fit the worker. For example, providing anti-fatigue mats to decrease leg and back discomfort, carts to reduce heavy lifting and carrying, or even simple task lighting to ease eye fatigue can all help reduce the risk of WMSDs. Some ergonomics-related improvements require no monetary investment, such as rearranging the work routine to minimize repetitive and unnecessary motions, raising work heights to ease back bending, or implementing job rotation and stretching breaks.

Tip: *To reduce injury risks associated with heavy lifting try storing heavy items or frequently used items off the floor; preferably between knee and shoulder height. Getting someone to assist you with a lift or reducing the weight of the items to be lifted can also help. Carts, conveyors, and mechanical lifts are also great lifting aides.*

Why is ergonomics important?

Have you ever experienced pain or discomfort related to your job? Does it affect your ability to perform activities outside of your job like hobbies? By improving workplace ergonomics you can improve your health and reduce your risk of injury.



Did you know?

According to the National Institutes of Health (NIH):

- *Seventy to 85 percent of all people have back pain at some time in their life.*
- *Back pain is the most frequent cause of activity limitation in people younger than 45 years old.*

What can ergonomics do for you?

A good ergonomics program can improve worker health and safety, morale, productivity and job satisfaction while reducing injury rates, injury costs and employee turnover. Ergonomics interventions are intended to eliminate or reduce the risk of MSDs.

Ergonomics is important outside of work:

At home, ergonomics can make your life a little bit easier and more comfortable. It's the little things like putting a mat in front of the stove or kitchen sink to reduce fatigue, lifting groceries out of the trunk without twisting your back, and even adjusting your car seat and steering wheel to maximize comfort that make a difference in how you feel at the end of the day. By utilizing the same ergonomics principles at home that you use at work, you can reduce discomfort and fatigue and promote health and safety.

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