



# 5 minute safety talk

## Ergonomics

One-third of all workers' compensation claims are due to ergonomic issues, according to the U.S. Bureau of Labor Statistics. Ergonomics involves designing and arranging workspaces so people work efficiently and safely, but the study is not limited to the workplace. Ergonomics also touches people in their everyday lives. Consider the example of cars in the 1970s versus cars today. Control panels have been engineered to fit most drivers. Ergonomics issues need to be considered around the house, too, in activities ranging from painting and yardwork to knitting and crocheting.

Ergonomics is used to evaluate how you do tasks and to identify any risk factors that might lead to injury. Then, once identified, the next step is to find the best solution to eliminate risks or manage hazards. Your individual capabilities and limitations are considered to ensure tasks, equipment and your environment are best-suited to fit your needs.

## What are musculoskeletal disorders?

They are disorders that affect the human body's movement. Ergonomic conditions are disorders of the soft tissues, specifically of the muscles, nerves, tendons,

ligaments, joints, cartilage, blood vessels and spinal discs. If you experience pain or injury in your soft tissues, it might be caused by factors such as repetition (keying or mousing), force, awkward posture (is your computer monitor adjusted properly?), contact stress or vibration. To avoid confusion from other types of injuries, it should be noted that ergonomics disorders are not caused by slips, trips, falls or motor vehicle collisions. But car crashes can bring about the onset of ergonomics injury.

## Recognizing ergonomic symptoms

Common ergonomic symptoms include tenderness or numbness in soft tissue areas, tingling, swelling and pain. Sometimes difficulty moving or using an extremity is a symptom. These symptoms may trigger trauma or a disorder related to ergonomic conditions. If you are experiencing ergonomic symptoms, contact your human resources representative or safety professional. Then, if they are unable to determine the cause of your pain, see your physician or occupational physician.

# Ergonomic risk factors

The main categories of ergonomic risk are:

- Environment – risks found in your work environment (lighting, temperature, noise)
- Equipment – risks associated with the equipment you use and proper fit/adjustment (desk, chair, computer, keyboard, monitor and vibrating machinery such as a jackhammer)
- Work practices – risks caused by work requirements, processes or procedures (standing, repetitive motions such as assembly line jobs and skipping breaks)
- Individual – risks that are unique to you as an individual, such as a physical characteristic, habits and behavior (height, fitness, limitations)

Repetitive movements that may be non-strenuous or strenuous can cause musculoskeletal disorders. Some conditions can be brought on by:

- Sudden increase in your workload
- Introduction of a new process to your work routine
- Use of vibrating tools
- Maintaining poor or unhealthy posture

## Common ergonomic problems

You probably have heard of many of these common ergonomic problems: bursitis (inflammation of fluid-filled pads that act as cushions at the joints), carpal tunnel syndrome, osteoarthritis, tendonitis, tension (neck or shoulder, often the result of a pinched nerve) and trigger finger.

If you have been diagnosed with one of these conditions and your work tasks, equipment and environment have not changed, be sure to talk with your supervisor, HR rep or safety professional to find ways to adjust your work station and alter your patterns so they will not stress your soft tissues.

## Ergonomic solutions

To help minimize and possibly eliminate ergonomic risk factors, there are some steps you can take. Be sure to talk with an ergonomics expert to identify what is causing the symptoms and to find solutions to eliminate or reduce risks.

Anti-fatigue mats can help if you're standing for long periods of time, particularly on concrete surfaces. Alternating repetitive tasks with non-repetitive tasks at regular intervals or increasing the number of breaks from repetitive work also can reduce or eliminate ergonomic risk factors you may be subjected to in all facets of your life. Consider alternating different muscle groups – if you have to manually stack items, alternate with periodic rest breaks or more sedentary tasks like entering shipping data into a computer. Taking appropriate steps could lead to an increase in productivity. You should experience fewer injuries and fewer lost work days.