

# Ergonomics – Increasing Safety and Efficiency

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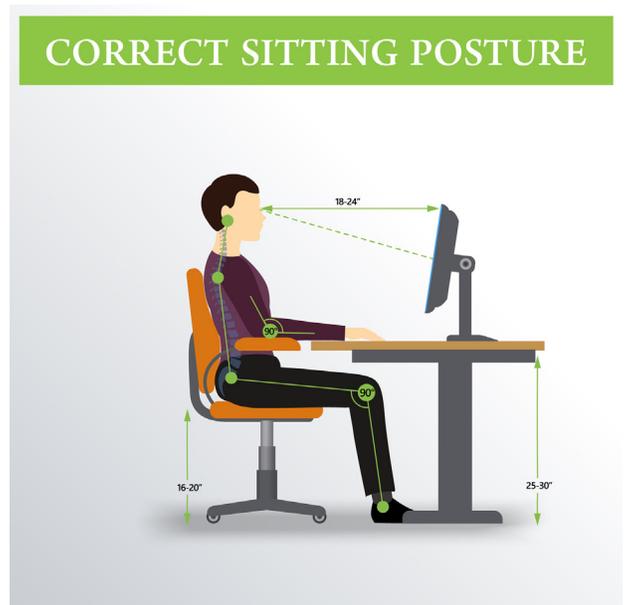
Increasing efficiency and safety should be key components of any business plan. Ergonomics, the science of fitting the job to the worker, helps lessen muscle fatigue, increases productivity and reduces the number and severity of work-related injuries. While most often associated with prevention of work-related injuries, ergonomics impacts many aspects of daily life, such as household chores or riding a lawnmower. Helping clients understand ergonomics and how it can improve safety and efficiency, as well as the company's bottom line, is another value-added service of the professional insurance agent.

The idea of ergonomics first appeared around 1857. The science started to become popular during World War II, when it was determined that modern machinery and weaponry were being designed by scientists without adequately considering the people who would be working with them. For example, pilots had trouble understanding the cockpit displays, leading to crashes. Factors such as hand-eye coordination and decision-making skills of the operators needed to be considered in the design.

Musculoskeletal disorders (MSDs) affect multiple parts of the body, including muscles, ligaments, blood vessels, ligaments and tendons. Symptoms of ergonomic-related MSDs often manifest after repeated exposure, as these injuries are usually cumulative rather than acute in nature. Therefore, individual events leading to the injury may seem insignificant. Risk factors include jobs that involve bending, lifting and stretching, or pulling or pushing heavy loads. Examples of Repetitive Motion Disorders (RMD) include carpal tunnel syndrome, tendinitis, and trigger fingers.

\$15 billion per year in workers' compensation costs, and 33% of work-related injury and illness cases are attributed to work-related MSDs. In addition, estimates of the total annual impact of work-related MSDs on the economy range from \$45-54 billion. According to OSHA, "Adapting tasks, workstations, tools, and equipment to fit the worker can help reduce physical stress on a worker's body and eliminate many potentially serious, disabling work-related musculoskeletal disorders (MSDs)."

A successful ergonomics program requires several components, including management's commitment to



the program as well as employee involvement. Identification of potential problems before they result in MSDs is crucial. Workers should be encouraged to report MSDs as soon as the problem is noticed. Early notification can reduce the number of long-term issues as well as time lost from work. Symptoms of successful ergonomic programs include employees who report less fatigue, increased morale, and reduced employee turnover.

Standing desks are an example of a response to ergonomic concerns. Prolonged sitting may lead to health issues, including obesity, blood clots and back and neck pain. Studies show that blood circulation can be improved by simply offering sitting and standing options in the workplace, and that, after eating, blood sugar returns to normal faster in people who have spent more time standing than sitting that day. The use of standing desks has increased from 13% in 2013 to 44% in 2017 ([www.shrm.org](http://www.shrm.org)). However, desks at the wrong height, or computer monitors and keyboards that are not properly positioned can cause other problems.

Efficiency and safety should be goals of any workplace. The use of ergonomic principles can be an important means of achieving these goals. Helping clients determine ways to improve their operations with ergonomics is another sign of the true insurance professional.

*Previously published in the Insurance Advocate®*



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