

When reaching overhead for an item, does your neck twinge or ache? Or when you leave work, do you have shoulder, back or hip discomfort? Improper ergonomics can turn these descriptions into painful realities for workers and painful operational and financial consequences for employers. The good news is that industrial organizations have many opportunities to create and reinforce employee awareness about ergonomic safety and, in the process, become "ergonomically correct."

According to the Merriam-Webster Dictionary, ergonomics is "an applied science concerned with designing and arranging things people use so that the people and things interact most efficiently and safely." The concept is also referred to as biotechnology, human engineering and human factors.

## What Is Ergonomics?

In the workplace, proper ergonomics align a job's physical demands with both the surrounding work environment and the required tools and equipment. Proper ergonomics vary from person to person but result in a workplace specifically designed and engineered to reduce bodily stress that might trigger pain or injury.



#### **Ergonomic Injuries and Causes**

Ergonomically induced pain and injury are commonly known as musculoskeletal disorders (MSDs), which the U.S. Department of Labor describes as injuries or disorders of the muscles, nerves, tendons, joints, cartilage and spinal discs. Various industries and occupations expose workers to different risk factors, but the main causes of MSD pain and injury result from workers repeatedly performing the same motion or pattern of motion, such as:

- lifting heavy items
- bending down or reaching overhead
- pushing or pulling heavy loads
- using tools or machines that cause vibrations
- handling objects that weigh more than 25 pounds
- working in fixed or awkward positions
- performing work that is mechanically or electronically paced

According to the U.S. Bureau of Labor Statistics (BLS), musculoskeletal disorders are one of the leading contributors to work-related injuries and missed days of work. It's important that both employers and employees are aware of the consequences of incorrect ergonomics and report any issues in their early stages.

## Why Is Ergonomics an Issue for Industrial Employers?

Because of the types of physical labor required in a manufacturing facility, industrial employees are particularly susceptible to ergonomic-related injuries. According to Liberty Mutual, the largest workers' compensation insurance provider in the United States, overexertion injuries—lifting, pushing, pulling, holding, carrying or throwing an object—cost employers \$13.4 billion every year.

The BLS reports that in 2012, laborers and freight, stock and material movers had the highest number of musculoskeletal disorders, which accounted for 34 percent of all reported workplace injuries and illnesses that

of all workplace injuries and illnesses that required days off were due to ergonomic injuries.

Source: Bureau of Labor Statistics 2012

required days off.

When an employee is out of work because of injuries such as a pulled back or strained shoulder, the impact is felt throughout the entire team; other employees have to fill in, new people have to be trained and deadlines may need to be pushed back. Workrelated injuries can indicate a lack of management attention to safety and efficiency. Because ergonomics is not the flashiest of industrial safety programs, it sometimes receives less attention than other safety measures, but it is significant to running a stable and safe operation.

# 26,770

the number of laborers and freight, stock and material movers experiencing a musculoskeletal injury in 2012 **13** median days away from work

## Simple Ergonomic Safety

Almost all instances of ergonomic injury can be prevented or avoided. To reduce bodily stress in a manufacturing setting, managers should look closely at the human engineering aspects of ongoing work flows and processes, employee workstations and job-required equipment and tools. Adjusting or reengineering any of these components can significantly improve ergonomic conditions.

Industrial employers can take a few easy steps toward ergonomics safety by:

- being knowledgeable and active advocates of ergonomics
- involving workers to be part of the solution
- providing proper training and awareness
- identifying potential problems
- encouraging early reporting of MSD symptoms
- ensuring that company-specific protocols are being fulfilled
- evaluating progress for continued improvement

Keep in mind that ergonomics safety should be viewed as an ongoing function that is incorporated into a company's day-to-day operations.

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#### **Benefits of Proper Ergonomics**

Any company that takes ergonomics seriously will reap a number of benefits, which OSHA identifies as:

- lower injury rates
- increased productivity
- improved product quality
- reduced absences
- reduced turnover
- lower workers' compensation costs
- improved worker safety
- increased worker comfort
- reduced worker fatigue
- improved worker morale

With benefits like these, who wouldn't want to make ergonomics a priority?



#### Randstad. Your partner in safety.

Randstad believes firmly in the value of a safe workplace and provides safety training to all talent through an initial safety orientation. In addition, Randstad's safety team coaches and trains talent at client sites during normal "tail-gate" safety topic meetings or other training sessions.

Randstad is poised and ready to deliver skilled and safety-trained talent for a full range of positions. With the right talent on board, just think what more you could do to drive your business success.

#### **Resources:**

http://www.merriam-webster.com/dictionary/ergonomics

http://www.bls.gov/iif/oshfaq1.htm

https://www.osha.gov/SLTC/ergonomics/

- http://definitions.uslegal.com/e/ergonomics/
- http://www.bls.gov/news.release/osh2.nr0.htm
- https://www.osha.gov/Publications/osha3125.pdf

