





# LEVERAGING WORKPLACE ERGONOMICS

It is time to recognize ergonomics as a return-to-work and productivity tool that enables injured workers to recover at their original jobs. BY SEBASTIAN GRASSO

United States military in World War II. As war planes gained a more important role in warfare, the U.S. government realized that with the hefty investment it was making in the planes, it was critical to reduce pilot error resulting from poorly designed cockpits. The government interviewed pilots about their flight experiences after they landed. They then leveraged ergonomics to re-engineer confusing instrument panels and cockpit arrangements that might lead to accelerated pilot fatigue, rendering the pilots less effective in their missions. Soon,

ergonomics was integrated into all military equipment

and, eventually, American industry.

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ics was an engineering strategy of the

Today, most of us use ergonomics every day without giving it a second thought. Each time we get into an automobile to drive, we adjust seat distance from the pedals and steering wheel and seat height for viewing over the dashboard. We adjust all mirrors to assure that we have the best view of our surroundings. These adjustments reduce accidents due to driver error, save lives, and enable us to drive longer distances by minimizing discomfort and fatigue.

## **Perception and Reality**

So what is ergonomics? Ergonomics means different things to different people. In workers' compensation, the perception of ergonomics is not well aligned with the value it brings to reducing claims cost for an injury. In many claims organizations and small to midsize employers, ergonomics often is seen as a process of purchasing costly equipment upgrades for one injured worker that sets off a firestorm of requests for the same equipment by non-injured coworkers. It is viewed as a whimsical journey through a catalog (think the Sears Wish Book) of all things cool and unnecessary to accommodate an injured worker's return to the work environment. Another misconception within this demographic is that ergonomics only impacts office environments and, therefore, is not considered for non-office work environments.

It is time to recognize ergonomics as a return-to-work and productivity tool that enables injured workers to recover at their original jobs. Ergonomics is a specialized adjustment to any work environment that, when integrated correctly, increases worker productivity and decreases worker discomfort and injuries by fitting the job demands to the specific ability of the injured worker. The value of leveraging ergonomics is not restricted by industry or job type. Take construction for example; most construction sites are highly dynamic with lots of tasks and movements taking place.

The more dynamic the work environment, the more opportunity there is to identify changes that will benefit the workers and their productivity. Real-world examples include a foundry worker restricted from work because of one task that was assumed to have caused his right lateral epicondylitis (tennis elbow). The worker was required to make micro adjustments while lowering a 3,000-pound steel mold suspended from the ceiling. With the use of a force gauge dynamometer, the ergonomics specialist determined that the force required to move the mold was only 12 pounds (six pounds per arm) and required the worker to use a "power grasp" not associated with lateral epicondylitis. Upon further investigation, the expert identified that the primary lateral epicondylitis risk factors occurred when carrying items necessary for the job using a "pinching" grasp. All that was necessary to provide a safe pathway to productive work was the purchase of a wagon.

#### Anthropometry

Anthropometrically speaking, not all things fit all people. Savvy employers understand this and employ adjustable ergonomic fixtures when building or retrofitting facilities. Work environments that are adjustable assure that the majority of workers will be as productive as possible without discomfort. These environments allow the workers to remain in neutral postures for as long as possible, limiting the wear and tear on their bodies.

However, it is not always realistic for small to midsize employers with limited resources to re-engineer their work environments. These employers should encourage their employees to notify them of discomfort as early as possible. Then the employer can interact with the workers to determine when and why they are experiencing discomfort and to identify what low-cost ergonomic changes can be implemented.

## The Aging Workforce

Ergonomics also plays a valuable role in the aging workforce. Long-term employees find that as they age, their body composition changes. They might experience weight gain or muscle loss and fatigue. Many of these employees can benefit from slight changes in the way they interact



with their work environments. Habits and techniques that may have served an employee well during the majority of his career may need to be evaluated and adjusted to a changing physical makeup.

A major challenge that employers face with the aging workforce is the older workers' fear of losing their jobs if they report pain and discomfort. It is imperative that employers communicate with their aging employees in a supportive manner in an effort to dispel that fear and to identify ways to make simple ergonomic changes that allow them to stay on the job.

#### **Post Injury**

The role of ergonomics in post-injury workers' compensation claims mitigation is significant. Because small to midsize employers usually have little experience with ergonomics, the overwhelming majority of their work environments could benefit from low-cost or no-cost accommodations that are best identified by an expert on-site. When presented to the treating physician, these accommodations often promulgate the elusive work capacity associated with musculoskeletal injuries. Physicians who do not provide limited work capacities regarding an injured worker typically lack objective information about the person's job. A proper ergonomic analysis outlining why the ergonomic changes being made in the work environment will allow the employee to recover at work often is all that is necessary to obtain a work release from the treating physician.

Claims representatives who succeed in securing a work capacity often face an employer that refuses to allow workers to return unless they are at full duty. Many employers assume that if the injured worker has a restriction, it unequivocally precludes the injured worker from performing his regular job. Most small to midsize employers are incredibly busy and find it easier to say "no" to return to work when a claims representative calls to see if they can accommodate. At this stage, it is important for a claims representative or case manager to ask a work environment specialist with ergonomic

expertise to go on-site at the original job. The specialist can identify whether no-cost or low-cost ergonomic accommodations can be made that will allow the injured worker to recover, productively, at work. The employer with little or no ergonomic expertise is usually too close to the work to analyze it with an objective, ergonomic eye.

# **Symptoms Equal Opportunity**

When it comes to cumulative musculoskeletal injuries, there are two roads the employer can take. The road less traveled will provide the most value and is the one taken by sophisticated employers. These employers understand that compensable cumulative injuries start with mild discomfort weeks or even months before the filing of a claim; they begin as a symptom.

Reporting a symptom in the early stages gives the employer an opportunity to look at the work environment and to identify what tasks are contributing to the symptoms that the worker is describing. It is important to determine when in the work process the symptom begins and whether it subsides or lingers. By engaging the injured worker in the ergonomic risk factor identification process, the employer is developing trust and goodwill with the employee. Often the changes require some trial and error, but if reported early enough, the employee does not risk exacerbating the symptoms before the risk factors are identified—the habits or techniques that contributed to symptoms in the first place. These employers also understand that the ergonomic changes they make often benefit additional workers, reduce future injuries, and send a message throughout the workforce that the employer recognizes the workers' value and will do what it can to keep its workforce healthy.

# The Six-Figure Eye Roll

The second road, the one that many employers take time and again, is the road of suspicion, and it is littered with increased and unnecessary claims costs. On this road, when a worker notifies the employer about cumulative pain and

discomfort, the employer responds with an eye roll.

This occurs because there was no accident, no event, and no witnesses. The worker's pain is subjective and the employer does not understand that the answer lies in the work environment. The eye roll sends a clear signal to the injured worker that his employer does not believe that his pain and discomfort is related to his job, and that sets most claims up for an adversarial and expensive ride. Ergonomics can still make an impact in many of these situations (assuming that the worker has not been terminated), but the claims representative needs to identify the need and overcome the employer's attitude toward the injured worker.

#### The One-Time Injuries

Acute musculoskeletal injuries are the sprains and strains that occur as a result of a one-time over-exertion. An example is the shoulder strain resulting from grabbing a railing while trying to avoid a fall. Often they are soft tissue injuries that occurred at work-not cumulatively—and often not as a result of performing a regular job. The ergonomic approach here is the same as with cumulative injuries, except instead of trying to identify the risk factors that caused the injury, the ergonomics expert is trying to identify and modify tasks in the regular job that, post injury, may prevent the worker from recovering while performing his regular job.

Insurance carriers and employers that leverage ergonomics on a post-injury basis reap the rewards of significantly reduced temporary total disability days and medical expenses. Employers ready to adopt this approach need to reset their thinking about ergonomics and utilize qualified work environment specialists who are adept at identifying ergonomic risk factors and the low-cost accommodations that will keep workers on the job. ■



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