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# Teamwork

A Periodical for Providers and Clients of Comp1One

## Injury Prevention in the Healthcare Industry

Healthcare professionals often are so busy caring for their patients that they neglect to take care of themselves. This is a risky oversight as healthcare workers often put as much strain on their backs as workers in the heavy labor or construction industry do. According to the Bureau of Labor Statistics, employees in healthcare facilities suffer over 200,000 work-related injuries and illnesses per year which amount to nearly \$1 billion per year. As many as 50% of these injuries are musculoskeletal in nature and are related to improper body mechanics. Many of these are serious injuries and more than half require some time away from work.

When there is a mismatch between the physical requirements of the job and the physical capacity of the worker, work-related musculoskeletal disorders (MSD's) can result. An on-site job analysis can effectively remedy this disparity by creating an accurate job description. Ergonomics, the science of fitting the job to the worker, provides a means for adjusting the work environment and work practices, to prevent injuries before they occur. Healthcare facilities have been

identified as an environment where ergonomic stressors exist. A commitment from management and participation of employees is required to eliminate these barriers and ultimately reduce the number of injuries. Employees place themselves at risk when they practice improper handling, transferring and repositioning of patients. These tasks pose increased risk if they are repetitive, performed in awkward postures or performed without assistance from additional staff. Other factors that increase the possibility of injury to healthcare employees are the growing population of obese or bariatric patients and patients with multiple medical problems who require total assistance from the healthcare provider.

Hospitals and other healthcare facilities implementing ergonomics-based injury prevention programs have achieved considerable success in reducing worker-related injuries and worker's compensation costs. Some institutions have experienced additional benefits including reduced staff turnover, reduced absenteeism, increased productivity, improved morale, and a decrease in

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## Comp1One

Comp1One is a comprehensive case management company located in Huntsville, Alabama with clients across the Southeast. Comp1One and sister company, North Alabama Managed Care, Inc. (NAMCI), are divisions of Premier Health Networks of Alabama, LLC featuring PPO network access for direct medical cost savings in group health and workers' compensation.

Comp1One features 24 hour case management services with Certified Nurse Case Managers and the backing of our Board Certified Occupational Health Medical Director. Our nurses and physician are available for pre-certification, utilization management, file reviews, case referrals, peer reviews, and catastrophic injury management.

Comp1One is certified by the state of Alabama Department of Industrial Relations, is licensed and insured, and has been recognized for Best Practices in Injury Management in the state of Alabama.

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## Ergonomics 101

Ergonomics is a multidisciplinary field that applies knowledge from various fields including engineering, physiology, psychology, medicine, anthropology, and statistics. The basic objective of ergonomics is to optimize the interaction between the worker and the work system which consists of tools, equipment, and environment. Simply put, Ergonomics is fitting the work to the worker.

Ergonomics considers all aspects of the job from the physical stresses it places on joints, muscles, nerves, and tendons to environmental factors which can effect hearing, vision, and general comfort and health (heat, cold, light, noise, vibration, etc.). Applied Ergonomics can improve worker comfort;

reduce workers' compensation costs; increase the productivity of a manufacturing or service operation; improve product or service quality; improve worker job satisfaction; and improve maintenance of machinery (reduce cost, reduce time required, etc.).

Using the healthcare setting as an example, questions regarding the patient transfer process might be raised. If a nurse transfers patients as a part of their job, how much lifting is safe? What postures



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## Legal Brief

In U.S. Steel v McBrayer, released by the Alabama Court of Civil Appeals on 3/4/05, the court provided some guidance on the payment of TTD benefits. TTD shall not be paid at the same time a worker is receiving TPD. The injured worker is not entitled to TTD while he/she is recuperating from an unrelated condition that develops after the occupational injury. Lastly, TTD can be suspended before the employee reaches MMI if he/she is able to return to work full time at the previous wage level.

Ben Pugh, Attorney

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## Company News

Kudos to Mary Ann McMeans, Case Manager at Comp1One and President of CMSA, Huntsville Chapter. Mary Ann, along with fellow Board Members, organized this year's annual CMSA Extravaganza. The event was held at the Huntsville Roundhouse and was attended by over 100 health professionals from North Alabama and Tennessee. Great job Mary Ann!



Mary Ann McMeans



CMSA Board of Directors

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## Injury Prevention (continued)

patient injury. Injury prevention programs often begin with mandatory back safety classes for the staff. These classes can be an inexpensive and effective method for teaching staff the proper lifting techniques and body mechanics. Basic principals of body mechanics include lifting loads close to the your body, maintaining the natural spinal curves, bending at the knees and avoiding twisting activities.

More aggressive approaches to reducing injuries to healthcare staff involve the use of lifting and transfer equipment. An organization's need for minimal lift equipment is dependant upon the type of care provided and the population served. Also, to be effective, the organization must establish procedures regarding the utilization of equipment. In many cases injuries occur because the employee neglected to use available equipment. The most successful programs combine work practice, equipment use, and proper body mechanics education.



Team Lifting

In OSHA's guidelines, the goal is to "minimize manual lifting of (patients) in all cases and

eliminate it when possible."

Few people would disagree that back injuries and other MSD disorders are a common and serious occurrence in any type of organization. With the advancement of new technology, the increasing cost of worker's compensation and the shortage of nurses and other healthcare employees, it makes good sense to take preventative measures. For information on Back Education Classes and on-site Job Analyses, contact Huntsville Hospital's Therapy Services at 265-7101.

Stephanie Landrum

Physical Therapist & Program Manger  
Huntsville Hospital Therapy Services

## Ergonomics (continued)

are the most stressful? Is there a more efficient method of transferring patients? What height should the patient beds be? How much bending or other awkward posture is stressful to medical personnel? How does the awkward posture affect the care-giving process?

Similar questions can be applied to the business office, housekeeping, maintenance, dietary, surgery and other areas of the hospital. An ergonomic approach can assist with identifying these variables, determine their affect on the human body and reduce work injuries. The ergonomist creates a risk exposure model to determine the relative risk of the task. Both production and management staff provide valuable input concerning alternatives which will reduce the risk of injury, and increase productivity and quality.

Several aspects of the job are evaluated to assist with correcting accident/injury prone work conditions:

- Frequency – The greater number of repetitions a task is done, the greater impact it can have on the human body.
- Force – The greater amount of force applied to the musculoskeletal system, the greater impact it has on the human body.

- Posture – When working in non-natural, or awkward postures, the muscles cannot work in an efficient manner, thereby creating stress to the body.
- Exposure Time – If a task is done once per week, versus once per minute, it will greatly impact the stress to the body.

Other variables such as overall health, genetics, vibration, and stress levels also affect the above

variables, so the impact of an individual stressor (i.e., force, posture, repetition, exposure) is difficult to predict for each person.

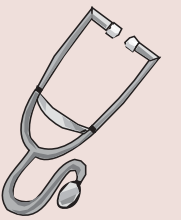
Many companies in the United States have very active ergonomics programs in place. These companies develop a culture or management process that solicits employee feedback concerning those job tasks that affect safety, productivity and quality issues within the organization. Sometimes small modifications to work procedures, posture, habits, and/or work station design can make a big difference in the way the worker feels at the end of a day. To find out more information about ergonomics in your workplace, contact Richard Wyatt.

Richard Wyatt Ph.D, PE CPE, CQE  
Aon Risk Consultants (256) 851-0811

**Ergonomics is fitting the work to the worker.**

# Clinical Comments

## OCCUPATIONAL LOWER BACK INJURIES



Low back injury remains one of the leading causes of occupational time loss and disability. It is slightly more common in men than women and it occurs in both white collar and blue collar occupations. The overall annual risk is less than 1% but can be substantially higher in manual labor positions. Occupations such as delivery truck drivers have risk reported as high as 6%. Although most are returned to the workplace in a timely fashion, the effects of the injury can be longstanding. Approximately 10% will not be working one year after the injury because of persistent pain. Reinjury is not uncommon and has been reported as high as 42% in workers that have returned to their previous positions.

The most common low back injury is the simple lumbar strain. As the name implies, this describes an injury to the paraspinal musculature of the lumbar spine. This is usually precipitated by a lifting injury; however, twisting, bending, pushing/pulling, and falling injuries are not uncommon. The pain is typically confined to the lower back and is aggravated by activity. On examination, palpable muscle tightness or spasm is often found in the lower back. The patient will be neurologically intact and workup with x-rays and MRI will be normal. Treatment consists of physical therapy, nonsteroidal anti-inflammatory agents (NSAIDS), muscle relaxants, and rest. The prognosis is good and

most patients should recover and return to work within a few weeks. Extremely long periods of convalescence and inactivity tend to be counterproductive. Reinjury is not uncommon and is best prevented by ergonomic alterations in the workplace if possible.

A very small percentage of injuries result in surgical pathology, with the most common diagnosis being a herniated lumbar disc. The disc has a



Dr. Joel Pickett

tough fibrous outer capsule called the annulus fibrosus. Within this capsule is a soft pliable core known as the nucleus pulposus. An injury can result in a tear in the fibrous annulus and allow extrusion of a portion or fragment of the soft nucleus. This extruded or herniated fragment can then compress a lumbar nerve root causing intense pain. This pain is typically referred into the leg and can be associated with numbness and weakness. Occasionally, a large disc herniation can lead to urinary incontinence. On examination, the pain is usually worsened with straight leg raise and there may also be absent deep tendon reflexes in the affected extremity, depending on the nerve root involved. Diagnosis is confirmed with MRI or a lumbar myelogram. Approximately 50% of

the patients with symptomatic lumbar disc herniations will improve with conservative measures, including physical therapy, analgesics, muscle relaxants, and corticosteroids (given either orally or via epidural injection); however, half will fail to improve despite a six-week treatment period and should be considered for surgery if the pain remains intense. If substantial weakness or incontinence occurs, surgical treatment should be employed urgently to improve the likelihood of neurological recovery. The preferred surgical treatment is a microdiscectomy. This is performed under general anesthesia through a 1.5 cm incision over the affected segment on the side of the disc herniation. The lamina of the specific vertebra is exposed and a small portion removed to expose the disc fragment and nerve root. The extruded fragment is removed, decompressing the nerve root. This usually takes no more than 30 to 45 minutes and commonly results in immediate pain relief. The patient is discharged two hours later and should be able to resume all normal activities and return to work within four to six weeks, depending on the nature of their occupation.

Although low back injury is a major cause of work time loss, it is treatable and every effort should be taken to speed the employee's recovery and return to work.

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