Ergonomics: A Modern Leading Indicator of Business Success

No longer just a problem to be fixed but an opportunity to improve business processes, productivity and profit.

When people hear “ergonomics solutions” they immediately think of added costs in equipment – computer keyboards, mice and height adjustable desks and chairs – and training. Today, however, more companies are discovering that ergonomics can provide not just improved worker health and safety, but bottom line benefits. Rather than looking at ergonomics as a problem that needs to be fixed, companies are beginning to recognize ergonomics as an opportunity to enhance their business processes with physical, cognitive and logistical improvements that support core business objectives – productivity, efficiency and profit.

What Is Ergonomics?

Ergonomics is the scientific study of people at work. The goal is to reduce stress and eliminate injuries and disorders associated with the overuse of muscles, bad posture, and repeated tasks. This is accomplished by designing tasks, work spaces, controls, displays, tools, lighting, and equipment to fit the employees’ physical capabilities and limitations.

According to the Bureau of Labor Statistics (BLS) and OSHA, in 2013, musculoskeletal disorders (MSDs) accounted for 33 percent of all injury and illness cases involving days away from work. OSHA estimates that MSD-related injury and illness cases now account for one out of every three dollars spent on workers’ compensation. They estimate that employers spend as much as $20 billion a year on direct costs for MSD-related workers’ compensation, and up to five times that much for related indirect costs. These indirect costs include absenteeism, staff replacement and retraining, productivity loss, and decrements in quality. MSD-related cases required an average of 11 days away from work, compared to an 8 day average for all types of job-related injuries and illnesses.

These are grim statistics indeed. As a business person, it is easy to become overwhelmed by the magnitude of the problem. Where to start? What to do? How does a business identify situations that can
cause musculoskeletal disorders? What can be done to avoid such costly situations?

Historically, ergonomics and safety have been approached from two perspectives: “reactive” where the focus is to rectify problems that have already caused an injury and “proactive” where the focus is on identifying potential problems and fixing them prior to any injury. While a proactive approach is typically less costly and provides a greater return on investment than waiting for an injury to occur, both approaches categorize ergonomics as a problem to be solved.

Process Improvement through Ergonomics

A more modern approach to ergonomics that has shown significant injury reduction and return on investment begins with changing the way business looks at ergonomic issues altogether. Rather than trying to identify ergonomic or safety problems that need to be fixed, forward-thinking companies have begun to look at business processes and how those processes can be improved through ergonomics to make it easier to perform the work required, thereby improving efficiency.

Work that is easier to perform is inherently less risky, and tasks can be made easier through improvements in a few broad categories: physical, cognitive and logistical.

Physical improvements relate directly to physical risks - awkward postures, static postures, high force exertions, repetitive motions, vibrations and contact stresses. Reduction of these risks leads directly to reductions in the strength, flexibility, reach or endurance required to perform a given task. This in turn translates into a task that is performed more quickly, with fewer mistakes and with less fatigue. The resulting task can be effectively performed by a higher percentage of employees. A quick time study can quantify in dollars how much improvement is expected from the changes.

Cognitive improvements are typically accomplished through improved display of information, where the resulting process requires less concentration to perform effectively, and consequently requires less time to perform. Improved information accuracy and reliability result in a higher quality product and a reduction in rework, both of which relate directly to improved financials.

Logistical improvements produce the most readily identifiable and quantifiable improvements, and often result in other cognitive and physical improvements. One example is simplified process flow, which helps reduce confusion and reduces or eliminates ergonomic risks such as high force exertions associated with manual material handling.

These process improvements are at the heart of the modern leading indicator approach to ergonomics, and tie directly to the profit and loss of a business.

Because the changes relate to a direct reduction in the cost of doing business, or to increased production capacity, businesses can more readily support these investments versus spending on safety or ergonomic fixes as a lagging indicator. With a clear return on investment, the cost of improving a process to produce a product faster and with less risk begins to look like a very wise use of business dollars.

By tying ergonomics to physical, cognitive and logistical improvements in business processes, tasks are made easier, quality and productivity increase, and the work becomes inherently less risky. This reduced risk enables businesses to reap the benefits that good ergonomics practices have always afforded – fewer injuries, reduced medical costs, less lost time, reduced worker’s compensation costs, and greater employee satisfaction and retention. All of these benefits together make for a healthier, more robust company, with more time and financial resources to pursue its primary business objectives.

Matthew Jaszkowiak is a Certified Professional Ergonomist (CPE) and Consultant with EORM. He has special expertise in industrial ergonomics, where he uses ergonomics, root cause analysis and Lean concepts to drive process improvements, efficiency, quality and safety. Matthew will be speaking at the 8th Annual BHS Health & Safety Conference on Wednesday, October 21, 2015.
Canby Excavating is a family-run business which operates on the foundational principle that a quality team results in a quality project. Our core values of honesty, integrity, safety, communication and hard work create a great place to work and result in quality projects.

How many employees do you employ?
70.

What is the biggest employee health and safety challenge you face?
Overcoming the mindset that productivity and safety cannot co-exist. The truth is that when safety becomes an instinct rather than a task it will increase productivity.

What health and safety programs have been successful for you?
Once a year we take an entire day with the company and have a safety day. We have guest speakers as well as open discussions with the whole team. This boosts the safety awareness level and creates a sense of unity that we are all holding safety as our key value. Weekly safety meetings and safety committees are great ways to keep this awareness rolling through the year but safety needs to come from the top down. This once-a-year event shows the employees just that.

How has Business Health Services helped your business?
BHS provides drug testing and DOT physicals. We also receive good information and resources from their annual safety conference.

What was the last good management book you read?
The Generosity Factor - Ken Blanchard and S. Truett Cathy

What is your leadership philosophy as it relates to your employees?
If I consider my employees more valuable than myself then the rest will take care of itself.

“Do nothing out of selfish ambition or vain conceit. Rather, in humility value others above yourselves, not looking to your own interests but each of you to the interests of the others” (Philippians 2:3-4 NIV)

What are your favorite business quotes?
“The test of a first-rate intelligence is the ability to hold two opposed ideas in mind at the same time and still retain the ability to function.” - F. Scott Fitzgerald

What else would you like to share with other business owners or managers?
Your employees are your most valuable asset; if you get them what they need, you will create an atmosphere for success.
Healthy Employees.
Healthy Business.

Employees are what make a business work. Business Health Services can help you keep your employees on the job.

SERVICES
On-site delivery available for selected services
• Injury Evaluation and Follow-Up Treatment
• Federal and Non-Federal Drug and Alcohol Testing Services
• Adult Immunizations
• Respiratory Medical Surveillance
• Hearing Conservation
• Physical Examinations
  - Dept. of Transportation (DOT)
  - Dept. of Education (DOE)
  - Post-offer
  - Executive
  - Physical Demands Testing
  - DPSST Form F-2
  - DPSST Form F-2T
  - HazMat

ON-SITE HEALTH & SAFETY TRAINING
• CPR/First Aid
• Blood-borne Pathogens
• Reasonable Suspicion Training for Supervisors
• Diabetes Awareness
• Nutrition
• Stress Management

VISIT US ONLINE!

The Business Health Services website is a useful resource for your company. You can print out BHS forms, review prep instructions and much more.

Check us out today at: Silvertonhealth.org/business-health-services
8th Annual BHS
Health & Safety Conference
Wednesday, October 21, 2015
7:00 a.m. - 3:45 p.m.

Agenda

7:00 - 7:50 a.m. Registration, Exhibits

7:50 - 8:00 a.m. Welcome and Opening Remarks by Marilyn Trinkle, Director, Business Development, Business Health Services

8:00 - 9:00 a.m. Keynote Speaker, Dr. Christopher Van Tilburg, M.D.

Anatomy of a Search: Lessons from Mountain Rescue
In Anatomy of a Search: Lessons from Mountain Rescue, Dr. Van Tilburg describes thrilling rescues involving emergency wilderness medicine with the Hood River County Sheriff Search and Rescue Team, and discusses how the lessons of safety, risk, responsibility, teamwork and camaraderie are equally important in the workplace. Drawing from tense, life-threatening situations, Dr. Van Tilburg correlates rescue proficiency with essential workplace skills and techniques.

This vital workplace toolbox also includes risk management, organization and safety. He demonstrates how these skills are important for managers and leaders, as well as for every member of the team, and shows how these lessons can be migrated from the mountains to the workplace.

In addition to describing case studies, he describes his role as medical advisor to his search and rescue team, which involves member wellbeing, safety, quality assurance and training oversight.

9:00 - 9:30 a.m. Break, Exhibits

9:30 - 10:30 a.m. Clarence M. Belnavis, Partner Fisher & Phillips, LLP

Stoned at Work: What’s an Employer to Do?
Oregon recently legalized marijuana for recreational use. Employers want to maintain a safe, healthy, and productive workforce, but how can they do that in light of this new legislation? This presentation will address the employment law implications of employees using marijuana and other common drugs at work. We will examine hiring, discipline, testing, and termination as they relate to the general employee population, with a focus on non-safety sensitive positions.

10:45 - 11:45 a.m. Matthew Jaszkowiak, Certified Professional Ergonomist (CPE) and Consultant with EORM

The Business Case for Ergonomics and Innovation
In today’s economy, businesses must be flexible and efficient if they expect to survive. This necessitates business situations that are rapidly changing and constantly evolving. These constantly changing work environments can often present significant challenges, both from an economic and from a health and safety perspective. This presentation describes a successful, tactical approach to facilitating change through ergonomics and innovation, while significantly improving the bottom line. Several case studies will be included. The concepts discussed are applicable to every industry and every place where people are tasked with accomplishing work. At the end of the day, ergonomics and innovation make good business sense.

11:45 - 1:00 p.m. Lunch, Exhibitor Prizes Awarded

1:00 - 2:30 p.m. Sam Rader, Owner, Proactive Injury Prevention Inc.

Nutritional Health & Wellness in the Workplace
This session is an interactive discussion on nutritional choices, dieting and the importance of staying properly hydrated at work. It targets the overall wellness of employees, mentally and physically. Learn strategies to help overcome obesity, stress and chronic fatigue. This program is designed to help identify potential health concerns before they become serious injuries.

2:30 - 2:45 p.m. Break

2:45 - 3:45 p.m. Paula K. Jones, CSP, CET, SAIF Sr. Safety Management Consultant and Angie Wisher, SAIF Sr. Safety Management Consultant

Cool Tools
If you have ever wished they had an easier way to lift a large flower pot or transform an everyday pair of shoes into ice walkers, this session is for you. This will be a hands-on session in which you will be introduced to a variety of products that can help make daily activities easier and safer regardless of the industry. We hope you will find a few tools to share with your peers, but you may just find something that you can use in your own daily activities—at home, at work, or at play.

3:45 p.m. Drawing for BHS-contributed door prizes
Eighth Annual BHS Health & Safety Conference
Wednesday, October 21, 2015 • 7:00 a.m. - 3:45 p.m.

Participant Registration
Early registration is recommended, as space is limited.

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**Registration Fee**

- ☐ FREE - BHS Preferred Business Members (Limit four representatives per company)
- ☐ $50 per Registrant (Non-Members)

*Registration fee includes continental breakfast and lunch*

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Please make checks payable to: Business Health Services

Send completed registration form to: Business Health Services, Administration

Mail: Woodburn Health Center
     1475 Mt. Hood Ave.
     Woodburn, Oregon 97071

Fax: 971.983.5229

Email: Ineufeld@silvertonhealth.org

*Please direct questions to Lori Neufeld at Ineufeld@silvertonhealth.org or 971.983.5223*