

# STRUCTURAL BUILDING COMPONENTS MAGAZINE

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## Injury Prevention in an Aging Workforce by Fred S. Drennan and David Richey, Ph.D.

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*Just how does an aging workforce impact a company's injury rate and health care costs? The cost—on both culture and safety—may be greater than you think.*

### STRATEGIES FOR INTEGRATING SAFETY, FITNESS & SUPERVISOR LEADERSHIP

With baby boomers entering their 50s, employers are feeling the impact of an aging workforce. According to the Surgeon General, 60 percent of adults are overweight and out of shape (Satcher). This is a major cause for concern, not only because it affects general health and healthcare costs, but because it can lead to cumulative trauma disorders (CTDs) to the back, knees, shoulders and neck. These injuries make up half of all workers' compensation (WC) costs (BLS; University of Maryland). Yet, general fitness—the ability to perform everyday tasks without excess fatigue or injury—is rarely a part of an injury prevention program.

Never has there been a greater need to help workers improve their fitness and adopt healthier lifestyles. Anyone who has ever tried to maintain a fitness routine or stick to a diet knows that the need for better fitness does not necessarily translate to accomplishment. This article clarifies the need to integrate personal fitness into worksite safety leadership programs and defines the key features and strategies of effective integrated programs.

### WHAT IS THE IMPACT OF THE AGING WORKFORCE?

In America, a person turns 50 every eight seconds. Those 50 or older comprise 52 percent of the workforce today, and 75 out of every 100 will remain in the workforce until they are at least 65 (Winger). These numbers will have a major impact on employer healthcare costs.

American businesses spent half a trillion dollars on healthcare and WC last year, mostly due to illnesses that are the result of unhealthy lifestyles, such as smoking, excess weight, lack of exercise and poor nutrition. In 2001, "preventable" WC and healthcare costs exceeded six times the profit of the top ten U.S. corporations. Diseases controllable by lifestyle cost the U.S. \$400 billion in healthcare annually; and in WC, CTDs alone exceed \$65 billion ("Top Ten Companies"). Never has the case been more justified to integrate fitness into the daily worksite safety culture.

### MAKING THE SAFETY/FITNESS CONNECTION

Lack of flexibility and strength is a primary risk factor for low-back and other soft-tissue injuries (Hoeger and Hoeger). Back injuries and other CTDs account for half of all WC costs (BLS). In this

environment, an effective safety program is not complete unless it addresses flexibility and strength as preventive measures for musculoskeletal injuries (MSDs). Basic flexibility, strength and knowledge about fitness and health are an individual's most important safety asset. Management must educate employees about the important role that flexibility and strength play in preserving their fitness, and should include daily stretching as part of employees' safety routine. And, if they really want to reduce injury rates and incidents, they must mandate participation.

Consider the following examples:

- **Poor hamstring flexibility.** Traditional back safety training theory says to "lift with the legs." Employers sign up their workers for annual back safety training, yet back injuries continue to be the second-leading cause of workplace absenteeism. Why? When theory translates to practice, proper lifting prevents injury. However, too many employees fall short of the proper lifting model as they perform daily tasks. They lack hamstring flexibility and strength in the quadriceps to get into the proper lifting position.
- **Muscle imbalance.** Working in the same position or performing the same task repeatedly will eventually cause the body to develop muscle imbalances that result in chronic poor posture. Even when workstations are designed to ergonomic standards, employees suffer pain and discomfort from chronic poor posture due to muscle imbalance. A well-designed flexibility and strength program can improve damaging postures, relieve chronic pain and may reverse injury or prevent costly surgery for CTDs (Hoeger and Hoeger 116).

## **FLEXIBILITY & STRENGTH TRAINING**

To achieve maximum participation in a fitness initiative, a firm must adopt a program that a majority of employees can perform without strain or pain, and integrate it into the daily safety routine. Most individuals will tolerate a gradual introduction to stretching and strengthening moves. These moves can usually be performed in regular clothes without getting on the floor. Because stretching feels good, employees feel the benefits almost immediately.

## **MAXIMIZING RETURN ON INVESTMENT THROUGH INTEGRATED SAFETY, FITNESS & LEADERSHIP**

To survive in today's economy, organizations cut costs wherever possible. Department heads, including the safety department, must justify their budgets. Senior management asks for return on investment (ROI) for any costs above normal operating expenses. Integrating safety, fitness and leadership can broaden the impact of safety investment beyond just the reduction of WC cost.

## **LINKING SAFETY & HEALTH: NEW OPPORTUNITIES FOR ROI**

WC and healthcare costs are two sides of the same coin. Half of all WC costs originate from CTDs (back injuries, carpal tunnel syndrome, chronic pain and other musculoskeletal injuries) (BLS). Half of all healthcare costs are the result of unhealthy lifestyles. In 2000, the direct medical costs associated with physical inactivity alone were \$76 billion (CDC). Healthcare costs average about three times the cost of WC. Given these statistics, it is clear that improving the fitness

level of the workforce by helping them adopt healthier lifestyles has a huge potential for cost savings—not only in WC and healthcare, but also in having a more fit, productive workforce.

## **LINKING SAFETY TO PRODUCTIVITY: LEADERSHIP SKILLS**

Integrating fitness, leadership and safety develops skills and creates systems that translate across the organization. For example, the skills a supervisor uses to achieve record-breaking safety performance are the same skills required for improving productivity and quality, and reducing waste. Training safety leadership skills at the supervisor level and tracking performance improvement increases the value of the SH&E professional as a member of the management team. It not only makes the job easier, but it also produces measurable results that get serious support from upper management.

Integrated fitness, safety and supervisor leadership can extend safety ROI in many measurable areas:

- Reduced incidence and severity of CTDs
- 90-percent or greater participation rate in daily safety activities
- More skillful supervisor leadership
- Improved flexibility and strength for greater overall fitness and health
- Daily safety training for true culture/behavior change
- 30 to 80 percent of participants adopt healthier lifestyles
- Improved morale and feeling that the employer cares
- Increased focus on team-driven safety and health objectives
- Increased productivity through healthier employees
- Reduced healthcare costs

## **IS THE EMPLOYER RESPONSIBLE FOR A WORKER'S FITNESS AND HEALTH?**

If all employees took responsibility for their own fitness and maintained themselves at peak performance level throughout their adult lives, employers would have nothing to worry about. Injury rates would be cut dramatically, absenteeism would drop and our healthcare system would not be upside-down. However, many people do not take care of themselves, and they are getting older. These people populate offices, work on shop floors, drive vehicles and operate equipment. They are loyal, experienced employees who often work in pain on a daily basis and do not report it. However loyal they are, productivity suffers.

In 2001, the Surgeon General reported that 60 percent of adults do not exercise enough to maintain basic health; one in four adults is totally sedentary (Satcher). Heart disease, Type 2 diabetes and stroke are all preventable with proper diet and exercise. This information is conveyed daily on TV, in magazines and newspapers, on the radio and on the Internet. Bombarded with this information, most people should be at the gym, slimming down and exercising every day—yet most are not. Half of those who start exercise programs with good intentions end up quitting within six months, and 90 percent quit within one year (McElroy).

## **EMPLOYERS MUST SHARE THE RESPONSIBILITY**

General lack of personal fitness has a tremendous impact in the workplace. Employees continue to suffer soft-tissue injuries, despite engineering improvements and efforts to provide ergonomically correct workstations. Excessive weight and lack of flexibility and strength in the general worker population take their toll on employees, while employers continue to suffer the losses, either in WC or healthcare costs. Therefore, while the individual must ultimately be responsible for his/her own physical condition, employers must “step up to the plate” if they are to remain competitive in today’s global environment. They must provide every opportunity to promote employee fitness—or suffer financial consequences.

## **MISPLACED FOCUS: A PASSIVE APPROACH**

Most workplace efforts designed to help employees improve their health originate in the human resources department. These efforts often take the form of passive information such as brochures distributed by healthcare insurance providers, or an annual health fair where employees can check their cholesterol levels or blood pressure for free. While this approach certainly has value, it rarely changes behavior. The reality is that most people wait until that first heart attack or stroke before they act to improve their health.

It will take more than pamphlets and health fairs to motivate the general workforce toward fitness and lasting lifestyle change. Employers must:

- build in time for daily fitness to keep workers of all ages healthy and productive
- educate employees about the risks to themselves and to the organization’s survival
- abandon the passive approach and integrate health and fitness into daily operations

## **DAILY STRETCHING BUILDS STRONG TEAMS**

One of the most profound outcomes of bringing the natural work group together for a daily stretch routine is team building. Team members have the opportunity to develop trust and camaraderie. Successful behavior-based safety (BBS) observation programs rely on trust. If these initiatives fail, it may be that no strategies to foster team building and trust exist (Quick). Organizations that lack trust in the environment have difficulty recruiting and maintaining observers. Workers fear backlash from reporting on other employees. Outside observers can be viewed negatively and participation can dwindle to zero [Drennan(a)].

Team building fosters good morale, trust, cohesiveness, communication and productivity. In a team-based environment, members support each other and care about each other’s safety. Observations of unsafe acts or near-hits at the team level become shared opportunities to improve the safety of the team, and do not simply “rack up” numbers of observations performed. Employee surveys consistently report that daily stretching with their team builds strong teams. Eighty-one percent of employees at a Ventura County public agency agreed that stretching is a powerful team-building tool [Drennan(c)].

## **CONCLUSION**

Worksite fitness, leadership and safety training are not new concepts. However, integrating fitness and leadership into the daily safety program can transform these programs into a dynamic new system to prevent illnesses and injuries before they occur. Rising healthcare costs can be just as preventable with improved overall fitness. By linking fitness and supervisor leadership to the safety program, the SH&E professional can exponentially increase his/her value to the organization and to the community at large. Adding fitness to daily safety training can help minimize the affects of the natural aging process as well.

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