Preventing WMSDs

A team effort enhances your effectiveness at stopping work-related musculoskeletal disorders. by Greg Worrell

An ounce of prevention is worth... Even without finishing this statement in print, your mind completed it with the answer: "a pound of cure." This well-known adage is true for many things, including the prevention of work-related musculoskeletal disorders. WMSDs are a formidable problem in business and industry, causing days away from work for 600,000 employees annually at a cost of $15 billion to $20 billion in worker's compensation and direct costs of $45 billion to $60 billion annually.1 However, this potentially crippling problem, economically and physically, is largely preventable through the application of science of ergonomics. Literally hundreds of case studies from a wide variety of business and industry have documented the effectiveness of preventing WMSDs while increasing productivity and reducing costs.2 Furthermore, this effectiveness in preventing WMSDs is enhanced by a "team ergonomics" effort consisting of management, employees, and trained professionals. How Management Contributes The prevention of WMSDs really does start at the top with management. Their role in prevention is deciding that protecting their employees during the manufacture of their product or delivery of their service is a "core value"—in the same way quality and profitability are probably core values of the company. This is commonly demonstrated in providing resources for ergonomic solutions and holding all staff accountable for their individual responsibilities within the ergonomics process. Again, the value of management's commitment to ergonomics is foundational to the prevention of work-related musculoskeletal disorders. How Employees Contribute Likewise, employees can prevent WMSDs by applying their ergonomics training and actually using good body mechanics and work methods. If their job is physical in nature, they will need to apply the scientific principles used by athletes to stretch their active muscles and prevent injuries. Employees must not only report potential problems in the workplace, but also they must be encouraged to help develop ergonomic ideas. (Nobody knows that the job better than the employee who does it every day.) Finally, the front-line prevention of WMSDs involves employees' commitment to use the administrative and engineering ergonomic controls that are developed. Outside Professionals' Role The third member of the company team is probably a professional within his or her own field of safety, engineering, or health care at the company. Because ergonomics training is rarely included in these programs, they have probably picked up a basic ergonomics background from a variety of sources. Ergonomics is usually just one of several responsibilities that are part of their total company duties. Because of these busy professionals' limited time for and/or training in ergonomics, a consulting certified professional ergonomist (the CPE designation) is sometimes employed to bolster these professional ranks. This is particularly true when starting an ergonomics program, for periodic ergonomics training of management and the ergonomics task force, or to revitalize an existing ergonomics program.4 Responsibilities of the professional team member may include doing ergonomics work or delegating and supervising ergonomics tasks. Good ergonomics is a bottom-line issue for good economics. Tasks necessary for the prevention of WMSDs include: the evaluation of jobs for WMSD risk (excessive force, repetition, awkward postures, vibration, and contact stress), practical ergonomics training at all levels, developing surveillance methods to determine where problems exist, and most importantly, solving ergonomic problems. Evaluating the effectiveness of these administrative and engineering controls, as well as the overall ergonomics program, is an important follow-up activity. 'Team Ergonomics' Plant professionals most likely will be part of a small "team ergonomics" task force dedicated to advancing ergonomics at the company. This small team (usually it consists of no more than a dozen people) is drawn from within the larger team of management, employees, and professionals. With their focus on the tasks of ergonomics, this team can see phenomenal success. I have worked in companies where this "team ergonomics" approach has been used to reduce WMSDs by more than 50 percent and continues to save millions of dollars annually. The roles of management, employees, and professionals are all integral to producing these results. Ergonomics is a proven way not only to prevent WMSDs, but to increase productivity and quality and reduce worker's compensation and medical costs. Good ergonomics is a bottom-line issue for good economics. References 1. OSHA. (November 14, 2000), Final ergonomics program standard. Federal Register 65 (200). Washington, DC: U.S. Government Printing Office. 2. Alexander, D.C.-ed. (1991). Applied ergonomics case studies volumes 1, 2. Norcross, GA: Engineering and Management Press. 3. Worrell, G.A. (2001). The work athlete: stretches for muscles at work. [Video and program]. Greeley, CO: Worrell Consultants, LLC. 4. Worrell, G. (January 2001). Revitalizing your ergonomics program, Occupational Health & Safety, 70 (1), pp. 93-94, 97. Dr. Greg Worrell (worrell.greg@juno.com or www.worrell-ergonomics.com), CPE, is a consulting ergonomist and principal of Worrell Consultants, LLC. He has been a college professor and was part of the Colorado governor's task force writing the "Medical Treatment Guidelines Related To Cumulative Trauma Of The Upper Extremity."