

Government Issues Update on WRMSD in Sonography

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It is well recognized that the practice of diagnostic medical sonography has been associated with significant risk for work-related musculoskeletal disorder (WRMSD). Research shows that 84% of clinical sonographers experience pain related to their profession. Of those, twenty percent suffer career-ending injuries. Workforce shortages are affecting productivity, patient care and reimbursement revenue. The Center for Disease Control (CDC) and National Institute for Occupational Safety & Health (NIOSH) have written a paper on sonography injury and how to prevent it. This is an official government publication, acknowledging that WRMSD is a problem in the sonography profession, and provides the basis for the CDC to potentially provide funding for prevention research targeted at an acknowledged 'high risk' population. Other legislative efforts have been ongoing in an effort to address this serious occupational health issue.

Congress passed the Federal Occupational Safety and Health Act in 1970. The purpose of the Act "is to assure as far as possible, every working man and woman in the nation, safe and healthful working conditions. Employers are subject to civil and sometimes criminal penalties if they violate this Act. The Occupational Safety and Health Agency of the U.S. Department of Labor administers the OSH Act. The agency is referred to as "federal OSHA" or, more commonly, "OSHA."

Congress gave each State the option of creating their own state-level agency to enforce the Act. About one half of the States opted to be regulated by Federal OSHA. Other States have created their own agency and are referred to as operating under a "State Plan." For example, California has a State Plan and it created its own agency, Cal/OSHA, which enforces safety regulations within that State.

OSHA has a four-pronged comprehensive approach to ergonomics designed to quickly

and effectively address musculoskeletal disorders (MSDs) in the workplace. The four segments of OSHA's strategy for reducing injuries and illnesses from work-related musculoskeletal disorders (WRMSDs) are:

1. **Guidelines**-OSHA will develop industry or task specific guidelines for a number of industries based on current incidence rates and available information about effective and feasible solutions.
2. **Enforcement**- OSHA will conduct inspections for ergonomic hazards and issue citations under the General Duty Clause and issue ergonomic hazard alert letters where appropriate.
3. **Outreach and Assistance**- OSHA will provide assistance to businesses, particularly small businesses, and help them proactively address ergonomic issues in the workplace.
4. **National Advisory Committee**-OSHA will charter an advisory committee that will be authorized to, among other things, identify gaps in research to the application of ergonomics and ergonomic principles in the workplace.

In addition to the OSH Act, OSHA enforces detailed regulations, called “standards” that have been written to protect workers from work-related hazards. If there is no standard that applies to a particular hazard, OSHA works to protect the worker by enforcing the General Duty Clause of the OSH Act. It is under the provisions of paragraph 5A(1) that OSHA cites for ergonomic disorders. Section 5B of this clause states that each employee shall comply with occupational safety and health standards and all rules, regulations and orders issued pursuant to this Act which are applicable to his or her own actions and conduct. The language in paragraph 5B gives the impression that the employee holds significant responsibility for complying with health and safety standards. However, although it appears that OSHA could fine the employee for not complying with health and safety standards, the employer bears most of the responsibility for compliance in the eyes of OSHA.

According to the Department of Labor, 60% of job related injuries are due to MSD's.

Incidents are defined as MSD's when they result in:

- Restricted work,
- Days away from work,
- MSD symptoms that remain for seven or more days
- MSD requiring medical treatment beyond first aid

National statistics for work-related injury and its costs were published at the time of the OSHA hearings in 2001 and 2002. Many industries believe that these regulations will cost much more than OSHA has estimated. However, costs associated with WRMSD in sonography have been shown to have a significant impact on the financial viability of imaging departments. One-week loss of revenue in sonography pays for one month's salary of a traveler or agency sonographer, based on 60% reimbursement of the billable amount. A piece of ultrasound equipment shut down for any reason, including worker injury, results in loss of revenue that in only one week far exceeds the amount needed to equip a lab with ergonomic equipment including a ergonomically designed exam table and chair that meet the need of the sonographer, accessory equipment to support the limbs and sonographer education.

After Congress rescinded the ergonomic rule, the Bush administration and the Department of Labor received a lot of pressure from the labor unions to create a way for employees to address their WRMSDs. In response, OSHA created the Alliance Program. This program enables organizations to work with OSHA to address injuries in the workplace. OSHA and Alliance Program participants work together to reach out, educate, and lead the nation's employers and their employees in advancing workplace safety and health. The Society for Diagnostic Medical Sonography (SDMS) became aware of this program shortly after it was implemented in 2003.

There are many benefits to participating in an Alliance with OSHA. The agreements, which are signed for two years, help organizations to:

- Build trusting, and cooperative relationships with the Agency
- Network with others committed to workplace safety and health
- Leverage resources to maximize worker safety and health protection
- Gain recognition as proactive leaders in safety and health

In May 2003, SDMS hosted an international consensus conference to draft industry standards for the protection from WRMSD for sonography. Joan Baker was asked by SDMS to chair the meeting and Susan Murphey was asked to provide an issue update keynote presentation. Thirty-two participants represented twenty-seven organizations. International representatives from Canada, Australia and the United Kingdom were present. The industry standards are intended to assist all stakeholders in making informed decisions, and, therefore, included breakout sessions to address the role of employees/employers, educators/accrediting bodies and equipment manufacturers in reducing the incidence/impact of these injuries on the workforce. Industry standards were successfully written to encompass best practices for the prevention of WRMSD in sonography, including, but not limited to:

- Equipment design
- Workload/scheduling
- Facility design
- Education/training

The need for accredited programs to include ergonomics and work injury prevention in their curriculum and certifying agencies to include testing knowledge of risk factors was also covered. Accredited labs should also consider compliance with basic standards of good ergonomics as part of the lab accreditation.

SDMS applied for an Alliance with OSHA, accompanied by a request that OSHA approve the Industry Standards. The Alliance program between OSHA and SDMS was signed in October 2004, along with an OSHA approval of the Industry Standards for the Prevention of Work-Related Musculoskeletal Disorders in Sonography. This was an important milestone, in that it resulted in the sonography profession now having

regulations, recognized by OSHA, available as a reference tool in protecting the worker under the OSH Act. Subsequently, in 2005 the health and safety officer for the United Kingdom obtained agreement from the SDMS to develop the industry standards further to apply to the sonography profession in the United Kingdom. The Australian Society of Ultrasound in Medicine also adopted the standards.

As part of their OSHA Alliance program requirements, SDMS is required to work with other Alliance partners who might be able to assist them in reducing injury in sonography. SDMS hopes to work with JCAHO, who is also an OSHA Alliance partner, to include ergonomic compliance of the ultrasound exam room as part of the JCAHO audit check off sheet for JCAHO inspections. It has been requested that the compliance requirements involve the issues of:

- Scheduling
- Facilities
- Technique
- Education

The premise is that compliance would simply mean checking the following:

- Staff have received continuing education in ergonomics
- Ultrasound performed on a height adjustable table
- Chair is height adjustable from a sitting position & has a back
- Patients are scheduled at least 30 minutes apart; add on patients included

Furthermore, under the Alliance program, it is agreed that OSHA and SDMS will work together to achieve the following training and education goals:

- Work with OSHA to provide expertise to develop and promote training and education programs on WRMSD issues for the medical ultrasound community
- Work with OSHA to provide expertise in developing information on the recognition and prevention of workplace hazards, and to provide expertise in developing ways of communicating such information to employers and

employees in the industry (e.g. print and electronic media, electronic assistance tools, OSHA and SDMS web sites)

- Speak, exhibit, or appear at OSHA's or SDMS's conferences, local meetings, or other SDMS sponsored events such as the SDMS Annual Conference

OSHA Administrator John Henshaw recently stated, "Workers in the medical ultrasound community have a disproportionately high MSD incidence rate and we believe this cooperative effort with SDMS will go a long way towards drastically reducing those injuries,...I'm confident that by working together, we can improve the health and safety for sonographers".

Other programs are available through OSHA to address work safety. The Voluntary Protection Program (VPP) promotes work-site based safety and health. This program is designed to develop cooperative relationships between management, labor and OSHA in work-sites who have successfully implemented comprehensive work-safety management systems. The VPP is operated under the authority of OSHA in accordance with the Occupational Safety and Health Act of 1970 (Section (2)(b)1). Employers participating in the Voluntary Protection Program have been shown to have reductions in injuries and illnesses resulting 'days away restricted or transferred' at a rate 52% below the average for its industry. Fewer injuries and illnesses mean greater profits through reductions in workers' compensation premiums and other costs, as well as increased productivity.

OSHA's Safety and Health Achievement Recognition Program (SHARP) recognizes small businesses that practice successful safety and health management systems. Among other things, SHARP recipients are exempt from programmed OSHA inspections during their SHARP certification period.

Much information is available regarding work safety in general as well as specific hazards relating to sonography. Recommended websites include those hosted by OSHA, Medlineplus, SDMS, and ASUM. A successful, efficient and productive ultrasound lab requires the involvement of everyone in the department. Through a team-based

environment, employees can be empowered and have ownership in improving the process they perform on a daily basis. Ergonomics programs are most effective when the elements outlined in the program emphasize the following points:

- ◆ Participation
- ◆ Motivation
- ◆ Efficiency
- ◆ Effectiveness

Creating a safe working environment for workers requires full cooperation from the entire workforce (managers, supervisors, and staff), for successful completion of the process. Successfully implementing a work safety program provides the foundation for workers to perform at their best level, thus supporting good patient care and employee retention, while also improving productivity and fiscal outcome.

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