



Medical Management of MSDs is Necessary

Despite the demise of OSHA's ergonomics standard, medical management of musculoskeletal disorders remains a company necessity.

On Nov. 14, 2000, OSHA issued its program standard for ergonomics. Since the 1980s, there has been considerable dispute within the medical, scientific, industry and labor communities as to the precise relationship between work activities and the development of musculoskeletal disorders (MSDs). Little guidance on this relationship has been forthcoming from various scientific assessments of the literature, including a National Institute for Occupational Safety and Health (NIOSH) epidemiological study assessment in 1997 and the most-recent National Academy of Sciences report.

The scientific uncertainty and industry protests about regulatory compliance costs, workers' compensation conflicts and a myriad of other concerns culminated in Congress recently negating the standard through the first use of the Congressional Review Act.

The OSHA standard would have covered certain basic requirements for each employer:

- A written program;
- Employee, management (and provider) medical training;
- Recognition of work-related MSDs;
- Workplace/job task changes;
- Appropriate job restrictions and placement (including salary/benefit protection);
- MSD (medical) management;
- Recordkeeping; and
- Surveillance and program evaluation.

Even though the requirements of the standard are not around to force com-

panies to comply with a specific ergonomics program approach, business must still show that it is paying attention to prevention and appropriate management of MSDs.

OSHA has previously cited a number of companies for alleged ergonomic problems under the Occupational Safety and Health Act's general-duty clause. Although met with limited success, huge sums were spent by employers involved and the government in resulting legal wrangles.

More important, employees will always have musculoskeletal complaints and conditions, whether they are work-related, work-aggravated or unrelated to job physical factors (i.e., "ergonomic risk factors"). There remain key concerns for developing and implementing an ergonomics and MSD medical management program in a high-quality, yet cost-effective, manner. Those concerns are centered on several programmatic issues:

■ When do you have an MSD?

Under the OSHA standard, an "MSD incident" was broadly defined as a work-related MSD where symptoms last for seven consecutive days, or the employee received medical care or missed or had restricted work. Additionally, the job had to be performed at least one day per week, and the tasks of the job had to be consistent with a list of ergonomic risk factors included in a "basic screening tool."

This checklist was similar to others proposed in the past, was extremely broad and required basically two hours or more of routine activities. Many jobs

throughout industry would have been covered, yet there were no supporting scientific studies that clinically validated such a checklist against the combination of ergonomic risk factors for specific MSDs.

Employers still have to contend with reporting and recognizing MSDs under Bureau of Labor Statistics (BLS) and state workers' compensation requirements. Considering that many companies have jobs that are similar from site to site, it is still important to make sure that corporate and local management staff and health care providers use a standardized listing of symptoms and other definitions or criteria to ensure site-to-site consistency and prevent inappropriate acceptance of complaints that are not true clinical MSDs.

For example, although discomfort would not have been allowed under the OSHA standard as a symptom, practitioners rarely require the designation of an exact International Classification of Diseases diagnostic entity before an "MSD" is assigned. All too frequently, we see terms such as "overuse syndrome" or similar designations. Such designations are rarely based on accepted diagnostic combinations of symptoms, physical exam findings and medical tests (e.g., nerve conduction velocity, including specific abnormal values). A case of tendonitis is frequently diagnosed just on symptoms without careful consideration of physical examination findings.

MSD symptoms can be quite broad. An employee with pain, fatigue and cramping may be designated as having an MSD unless occupational health providers follow stringent, objective diagnostic guidelines. These include medical specialty practice parameters such as those of the American College of Occupational and Environmental Medicine.

OSHA has compared injury and illness data from multiple company sites

in the past. If the agency plans to continue this trend for inspection and issuance of citations under the general-duty clause, consistency of employer MSD recognition will be important. Current BLS cumulative trauma disorder and MSD recording criteria do not require a diagnosis, so it is important to make sure that the symptoms represent a genuine occupational medical disorder. If not, evaluation and appropriate management of psychosocial factors or underlying systemic medical conditions should be considered.

■ Proper determination of work-relatedness of MSDs.

There were two levels for determination of possible work-relatedness within the overturned OSHA standard. The first level was meeting the basic screening tool. The second, the “job hazard analysis,” required that the employer use one or more MSD risk guidelines (although none have been validated clinically) or the assessment of a professional with appropriate “ergonomic” knowledge.

One of the key problems under the OSHA standard – and generally in occupational health practice – is what criteria are used, especially by health practitioners, to determine work-relatedness. A critical aspect of this determination is to ensure that local health care professionals use consistent criteria or instructions to determine which job(s) cause which MSDs. For example, does the job of maintenance mechanic cause carpal tunnel syndrome? Which low-back problems does the same job cause?

Another critical issue, especially under workers’ compensation or OSHA recordability, is when MSDs are only aggravated by work. Presently, few clinicians employ specific criteria for determining when work aggravates the underlying disease etiology vs. a temporary symptomatic exacerbation.

For example, does standing on a concrete floor aggravate underlying hip or knee arthritis, or just cause a temporary increase in pain? Many health providers may not know how to appropriately determine if there is a link between an employer’s jobs and reported corresponding MSDs. Undoubtedly, left up to each local facility’s interpretation, there could be great variability

and accuracy concerns as to work-relatedness of reported MSDs.

■ Providing medical care.

Although the OSHA standard did not specify medical treatment, it is obvious that much of the decision-making would have centered on appropriate diagnosis and treatment. The cost of such care, whether required by a government standard or through an employer’s occupational health or ergonomics programs, is borne by the company. However, employers do not consistently specify, nor did the OSHA standard spell out, how the company must pay for the care (i.e., through workers’ compensation or direct payment by the company).

If the company files each MSD incident under workers’ compensation,

Employees will always have musculoskeletal complaints and conditions, whether they are work-related, work-aggravated or unrelated to job physical factors (ergonomic risk factors).

this will undoubtedly increase the workers’ comp expense, even if it is just for diagnosis. It is likely, however, that one or more treatments will be specified for each MSD. Tracking the care, results and recommended restrictions will undoubtedly burden many companies’ workers’ compensation, as well as safety and health or human resource administrative processes. Some firms may need a new process to administer, oversee and pay health providers.

Further, if the health providers do not employ appropriate diagnostic criteria and adopt corresponding treatment plans, employers could face increased direct and related costs, such as for employee replacement and training. Additionally, cases that might not otherwise qualify under workers’ compensation may require medical management if diagnosis and treatment activities do not follow carefully derived criteria and protocols.

■ Documentation and adequacy of training.

Significant training of associates, management and, especially, health

providers for MSD symptom reporting, disorder determination, causation, return to work, restrictions and medical management is routinely specified in proposed standards and recommendations. This training frequently includes triggers for early recognition of symptoms and provision of material to the health care professionals, whether or not there is an OSHA standard.

Careful construction of training material will help ensure that all meritorious health complaints are addressed appropriately. The training also has to be tracked so that new employees receive and employ it when it will do the most good – prior to initiating work and when symptoms arise. Such training should include scientifically valid techniques for hazard determination. The OSHA standard had referenced a vari-

ety of hazard assessment tools, such as “strain index.” The limitations, validity and utilization of such tools, however, should be carefully considered prior to their use.

For example, some tools have not been clinically validated. Some are useful for certain upper-extremity MSDs. Others employ methodology that is limited in its ability to predict an MSD hazard. There is considerable ongoing research in this area, and recent studies have provided considerable food for thought, requiring that training materials be updated frequently. Some employers use Web-based communication to update their local occupational safety and health staff and health providers with the “latest” study findings to ensure good clinical and administrative decision-making.

■ Determining and adhering to work restrictions.

All occupational health care professionals must provide any necessary work restrictions, including time off to recover for disability, under workers’ compensation and OSHA mandates.

This was an essential requirement under OSHA's ergonomics standard and has always been a key workers' compensation issue.

It is generally quite challenging to ensure that employer human resources and safety and health staff, in conjunction with the local occupational health provider, consistently and correctly use job-specific medical standards, examination procedures and restrictions to meet the Americans with Disabilities Act and other requirements. The OSHA standard would not only have accentuated this universal occupational health requirement, but also would have required that local facility management follow each restriction (including as the restrictions change over time) for a given MSD. In essence, each clinical encounter would have become a mini-employee placement determination.

Employers should track and update restrictions for workers' compensation and good occupational health practice. One of the most frequent complaints, however, is that obtaining such restrictions in a timely fashion, especially when there is a progressive resumption of duties, is difficult at best. Tracking the time frame that each restriction stays in effect will potentially require another layer of management resources unless information technology, such as the Web, is used. Providers and local facility management will be put to the task to ensure that the restriction-setting process during MSD recovery is consistent, standardized and meets the job requirements and the job modification approach used by each employer. Again, this will require tracking and appropriate criteria.

■ **Achieving consistency of activity across all company locations.**

The OSHA ergonomics program standard did not specifically state that all company facilities must use the same job hazard analysis. However, OSHA has previously compared employer facilities in their inspections for ergonomics under the general-duty clause. The agency will likely continue in this vein regardless of the presence or absence of a specific ergonomics standard. Additionally, good occupational health practice necessitates that the company examine its MSD ex-

perience periodically. The standard would have required a frequency of three years.

As many local facilities within a given company will have the same or similar jobs, standardized definitions, criteria, procedures, medical forms and record-keeping should be employed in the ergonomics program to ensure that data comparisons, over time, will be meaningful and comply with good occupational health practice.

Under the OSHA standard, each health care professional would have had to provide a statement that they have informed the employee about work-related or other activities that could impede recovery from the injury. Will all health providers, for example, be consistent as to which job activities

Whether or not an OSHA standard exists, criteria for determining whether a new complaint is a continuation, a new MSD or an aggravation of the earlier MSD, once the employee was "re-exposed" to job physical factors, must be developed and utilized.

of a production line worker might prevent appropriate rehabilitation from carpal tunnel syndrome? If a worker is overweight and has diabetes, how will each provider relate the impact, if any, of those two personal disorders on the recovery from carpal tunnel syndrome?

■ **Ensuring proper decision making as to restrictions, job modifications and medical care.**

OSHA had emphasized the importance of following specific definitions and triggers in determining when an MSD incident is present, whether it is work-related and recommendations under which an employee may return to work. The definitions under the standard, however, were not exclusive and allowed a variety of conditions, symptoms and signs. Additionally, the employer was free to choose job hazard analysis methodology.

Unless each employer clearly delineates the MSDs that will be associated with specific jobs, and restrictions and job modifications that must be followed for each MSD and job type, decisions will be made arbitrarily and may

vary greatly from location to location. This has enormous impact potential for workers' compensation, productivity and any present or future regulatory requirements. Without immediately available "expert assistance," management and providers will make mistakes and inconsistent decisions or require considerable ongoing guidance from regional and corporate staff and consultants.

■ **Maintaining medical records and provision to employees.**

Under the OSHA standard, a number of records, stored and evaluated periodically, would have been available to employees. The employer would have been required to keep the employee reports of MSDs, MSD signs and symp-

toms, and MSD hazards, as well as the employer's response to each. The time requirement was three years for some records and the term of the employment plus three years for others.

Many companies and health providers have general provisions for occupational health recordkeeping and make arrangements to store and review records periodically. The administrative recordkeeping necessary to effectively manage MSD complaints under workers' compensation or the general requirement of providing a safe workplace may be a new consideration for some companies. This may necessitate additional human resources to identify, track, store and make available records to employees, their representatives, OSHA and NIOSH.

Relatively few companies already have medical monitoring and surveillance records as a starting point to meet these objectives. They would have to institute new procedures, forms and privacy policies, as well as provide easily accessible, long-term storage capability, such as through the Web.

■ Coordination between workers' compensation claims procedures and OSHA compliance protocols.

Although not specified within the OSHA standard, the necessity to pay for medical care and evaluations, as well as compensate workers who cannot be employed due to restrictions, would have meant that many workers would have been jointly covered under the OSHA provisions and workers' compensation. Workers who would have continued to work under restrictions in modified jobs would have received their normal pay and benefits for up to 90 days, while workers who could not continue would have received 90 percent of their salary and all benefits for the same time frame. Under the standard, there were no prohibitions against employees repeating this process again and again after returning to work.

Under the stricken standard, employers would have had to track the differences in payment from state to state to ensure that any workers' compensation payment was deducted from the restricted OSHA payment requirements.

Another key data area that would have had to be tracked was whether employees who return to work from an MSD, and then complain shortly thereafter about a possible new MSD, truly have a new MSD or a continuation of the prior MSD. If it was a continuation, a case could have been made that the 90-day time period had expired. Thus, further compensation under OSHA would not be due; however, it may still have been required under workers' compensation. Whether or not an OSHA standard exists, criteria for determining whether a new complaint is a continuation, a new MSD or an aggravation of the earlier MSD, once the employee was "re-exposed" to job physical factors, must be developed and utilized. Appropriate occupational health practice and workers' compensation management already require such actions.

■ Data compilation, analysis and noncompliance recognition.

It will be interesting to see how OSHA approaches ergonomic inspections and citations in the future. As noted previously, the agency has used the general-duty clause in the past. Based on the outcomes of various legal challenges and negotiated settlements, it remains

unclear as to what employers should do, especially with regard to medical management and what the agency previously termed "medical mismanagement." In the past, OSHA compliance officers have focused on meeting "relevant time frames," especially for MSD (medical) management, and are likely to do so in the future. Certain ergonomics-related OSHA citations have been issued for alleged deficiencies, such as not following restrictions, excessive delays in having workers referred to the physician and sending workers back to full duty prior to expiration of restrictions.

Employers should construct a system to ensure that all appropriate actions are not only tracked, but that alerts for activities not in compliance with company protocols (and any future OSHA requirements) are provided to the appropriate parties. Additionally, management may want to compile relevant data from each work site and body segment by activity type, such as restriction time frames. This will ensure that OSHA inspections will be focused and that compliance officers do not use data from inaccurate sources or rely on mere allegations.

■ Periodic tracking and surveillance of program effectiveness.

The OSHA standard would have required that employers evaluate their ergonomics programs at least every three years to ensure that they were functioning effectively and to determine whether hazards were being addressed. This included demonstrating that there was a reduction in the severity and incidence of MSDs and an increase in the number of jobs controlled for risk factors. If "problems" were evident, the agency would have required consultation with employees (and their representatives) and more frequent evaluation.

Periodic program assessment is an essential element of any occupational health program. Frequently, however, the devil is in the details. Are the benchmarks that would have been employed by OSHA objective and supportable? As many companies will have limitations on engineering controls their facilities can implement, administrative controls plus medical management activities and appropriate job placement of em-

ployees will be vital for MSD control. Companies must choose specific measures that will include job modifications and restrictions over given time frames, for specific jobs and across specific company locations to clearly identify where problems may exist. This will require initial expert evaluation and the ability to collect and frequently analyze data in a total relational capacity.

Summary

Every employer must provide a safe workplace for its employees. This includes the prevention and management of musculoskeletal disorders when work-related. Presently, there is some evidence that certain physical work factors are associated with, or at least may aggravate, the symptoms of some health problems.

Because of uncertainties in the scientific basis for work-relatedness of musculoskeletal disorders and symptoms, as well as other issues, the OSHA ergonomics program standard in its present form has been removed by Congress. Elaine Chao, the new labor secretary, has indicated that new efforts in this area will be made; however, it is anybody's guess as to OSHA's next steps in ergonomics.

Development of appropriate, company-specific criteria, policies and procedures and automated tracking systems will help ensure the provision of quality health care and derive data to help further determine the precise relationship between work physical factors or activities and musculoskeletal disorders. Ergonomic programs, especially medical management for MSDs, make sense now as always. **OH**

Contributing Editor Howard M. Sandler, M.D., is president of Sandler Occupational Medicine Associates Inc./OccuLink, Melville, N.Y. He has designed and evaluated occupational health programs for many corporations.

www.occupationalhazards.com

To read other columns on occupational health management and practice by Dr. Howard Sandler, please visit our Web site.

