



American Association of Orthopaedic Surgeons

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**Statement of the  
American Association of Orthopaedic Surgeons**

**Presented to the  
Committee on Health, Education, Labor and Pensions  
United States Senate**

**Hearing On:  
“Over One Year Later: Inadequate Progress on  
America's Leading Cause of Workplace Injury”  
April 18, 2002**

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Mr. Chairman and members of the Committee, the American Association of Orthopaedic Surgeons (AAOS) appreciates the opportunity to comment on OSHA's recently released plan to address ergonomic injuries. AAOS is the leading and largest professional society for the medical specialty of orthopaedic surgery in the United States. The AAOS's 18,000 board-certified fellows comprise virtually all of the practicing orthopaedic surgeons in this country. Our fellowship has vast experience in diagnosing, treating, and advising on musculoskeletal disorders.

The Occupational Safety and Health Administration's (OSHA) plan is an important step in reducing ergonomic injuries. Targeted industry-specific guidelines coupled with focused, ongoing ergonomics research, can reduce work-related injuries. American workers need and deserve an efficient, effective, and practical approach to diagnosing and treating ergonomics injuries. It is essential that injured employees receive the best possible care and that interventions are timely and appropriate for specific workplace disorders.

**Appropriate Guidelines**

Developing appropriate guidelines can be a complex, controversial process that, more often than not, lacks consensus. Because of a lack of consensus in the scientific literature about the cause of ergonomics injuries, debate continues over which interventions can best be applied to reduce them. One of the big problems with the rescinded rule was its all-encompassing, over powering, and over burdening nature. In previous comments on this issue, AAOS urged postponement of the ergonomics standard, until more scientific data was collected and analyzed. Some of that analysis occurred recently.

The National Academies of Science (NAS) issued its study on the contribution of physical and psychosocial factors to musculoskeletal disorders of the upper extremities and low back.

*Musculoskeletal Disorders in the Workplace* pointed out that certain risks exist with particular industries. For instance, the risk of men developing musculoskeletal disorders was highest for construction laborers, carpenters, truck drivers, and heavy equipment operators. The risk of developing musculoskeletal disorders was highest among women who worked as nurse's aides, orderlies, licensed practical nurses, maids, and janitors.

Ninety five percent of the 19 experts on the NAS panel determined that "...there is a clear relationship between back disorders and physical load; that is, manual material handling, load

moment, frequent bending and twisting, heavy physical work, and whole-body vibration. For disorders of the upper extremities, repetition, force, and vibration are particularly important work-related factors." Importantly, NAS concluded "the weight of the evidence justifies the introduction of **appropriate and selected** interventions to reduce the risk of musculoskeletal disorders of the low back and upper extremities."

The NAS report also correctly pointed out that there remains a lack of "high-quality scientific intervention studies," which are necessary in order to adequately determine proper approaches to worker injury. Ergonomics injuries require great skill and clinical experience to diagnose accurately and consistently. What may work for one injured worker is not always guaranteed to prevent or improve symptoms in another.

OSHA is correct in asserting that ergonomics rules cannot be one-size-fits all. Rather than one broad overly prescriptive approach, such as suggested by the rescinded rule, it is more appropriate to develop and adopt industry or even job specific guidelines. If rules are not tailored to a specific industry or job, worker injuries may not be adequately reduced.

We believe that the OSHA 300 logs are an important tool that can be used to collect invaluable data for validating present and developing future interventions. Last year, OSHA delayed the requirement that employers check "musculoskeletal disorder" on the OSHA 300 logs in order to develop a more acceptable definition. OSHA is correct in assigning primary significance to a clear definition of "musculoskeletal disorder" and "ergonomics injury." Having national, clearly defined criteria to be used by all healthcare providers in identifying and diagnosing ergonomics injuries would improve our understanding of which ergonomic mismatches are associated with various musculoskeletal disorders and what interventions do or do not work. We urge OSHA to expeditiously define these terms so that important data can continue to be collected and workplace procedures can be effectively evaluated.

### **Role of Healthcare Providers**

The AAOS and its fellowship are committed to the delivery of the highest quality musculoskeletal care to our patients. We want individuals to work safely, remain productive on the job, and avoid the debilitation that inactivity can create. Given this, we were disappointed that the original rule seemed to go to great lengths to minimize the role of physicians and other healthcare providers in diagnosing work-related musculoskeletal disorders. Under the rescinded standard *employees* and their *employers* were allowed to determine if a musculoskeletal disorder was work related. Such an approach creates profound difficulties. A discussion of musculoskeletal disorders involves a major reliance on subjective complaints. Large numbers of patients who suffer from low back pain, wrist tenderness, shoulder aching, knee distress, or heel discomforts have no observable objective findings. That fact does not mean their problems are not real. It does make diagnosing and studying those problems challenging. We feel it is vitally important to involve well-trained healthcare providers, with some autonomy in reporting, as soon as questions arise about the diagnosis and causes of a worker's musculoskeletal disorder.

When employees present with musculoskeletal disorders, it takes a skilled, thoughtful clinician to determine when ergonomic changes will be helpful and whether the need for workplace restructuring is associated with, clearly related to, lit up by, or otherwise linked with the job.

It is easy to blur specific organic musculoskeletal disorders with aches, pains, tiredness, and discomfort. The AAOS supports early reporting of musculoskeletal symptoms, but we believe that the diagnosis of many common musculoskeletal disorders should be based, as much as possible, on objective findings. The lack of truly objective findings to verify many musculoskeletal disorders can lead to errors. Signs and symptoms should be carefully evaluated, against specific criteria, by qualified health care providers to ensure appropriate diagnosis and treatment. As patient advocates, the AAOS seeks remedies for injured employees that ease their pain and improve their function. This requires early input from skilled, competent health care providers.

We urge OSHA to be mindful of the important role healthcare providers must play when diagnosing and treating ergonomics illness. When developing new guidelines for industries it will be critical to ensure healthcare providers are involved at the earliest stages.

### **Focused Research**

The AAOS is committed to evidence-based medicine and to ongoing medical research in order to serve our patients. We believe that medical treatments and therapies should be grounded, as much as possible on valid, reliable, scientific data, and measures that are documented with effective outcomes.

The National Institute of Occupational Safety and Health (NIOSH) has outlined a comprehensive National Occupational Research Agenda (NORA) for musculoskeletal disorders. We urge continued funding and support for the research projects suggested by NORA, including the systematic collection and analysis of musculoskeletal disorder data and health and hazard information to identify trends. As the NAS study showed, the causes and preventions of some ergonomic injuries are becoming clearer. But, more research is needed to identify causation, prevention, diagnosis, treatment, management and intervention for many other ergonomic problems.

We are pleased that OSHA will stimulate and encourage needed research in ergonomics. Scientific research must drive our public policy in the national effort to prevent and reduce workplace ergonomics injuries. We also support the creation of a national advisory committee that will serve to counsel OSHA on research gaps. As research continues, it may be possible to find additional appropriate and selected ergonomic answers to musculoskeletal disorders. AAOS stands ready to help.

Mr. Chairman, the AAOS thanks you and all the Members of your Committee for holding this hearing and continuing to strive for effective, workable ergonomic solutions.