

 <b>OSHA</b> Occupational Safety & Health Administration U.S. Department of Labor	<a href="#">Home</a> <a href="#">Index</a> <a href="#">Search</a>			
	<a href="#">Technical Links</a>	<a href="#">What's New</a>	<a href="#">Subjects</a>	<a href="#">Comments</a>



[Ergonomics](#)



[Recognition](#)



[Real Solutions](#)



[Enforcement](#)



[Publications](#)

## Ergonomics

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- **NEW!** **"Best Practices in Ergonomics"** Conference September 8-9, 1999, Silver Spring, MD There's still time to sign up! [\[more...\]](#)
- [Speech](#) by Assistant Secretary to the National Association of Manufacturers on Safety and Health Programs and Ergonomics Standards. (July 21, 1999)
- [Speech](#) by Assistant Secretary to the National Coalition on Ergonomics. (1999, April 29)
- [Statement](#) by Assistant Secretary on Report of the Small Business Advocacy Review Panel on OSHA's Draft Proposed Ergonomic Program Rule. (1999, May 3)
- [Report](#) of the Small Business Advocacy Review Panel on OSHA's Draft Proposed Ergonomics Program Rule.
- [Statement](#) by the Assistant Secretary. (1999, March 4) "This nation cannot afford to wait any longer to address the serious issue of work-related musculoskeletal disorders."
- [Draft Proposed Ergonomics Program Standard](#)
- [Highlights of Draft Ergonomics Standard Proposal](#)

### What is ergonomics?

Ergonomics is the science of fitting the job to the worker. When there is a mismatch between the physical requirements of the job and the physical capacity of the worker, work-related musculoskeletal disorders (WMSDs) can result. Workers who must repeat the same motion throughout their workday, who must do their work in an awkward position, who must use a great deal of force to perform their jobs, who must repeatedly lift heavy objects or who face a combination of these risk factors are most likely to develop WMSDs.

### How serious a problem are WMSDs?

In 1996, U.S. workers experienced more than 647,000 lost workday WMSDs. WMSDs now account for 34 percent of all lost workday injuries and illnesses. These injuries cost business \$15 to \$20 billion in workers' compensation costs each year. Indirect costs may run as high as \$45 to \$60 billion.

Workers who experience WMSDs may be unable to perform their jobs or even simple household tasks. WMSDs represent real workplace problems faced by real people. The [scientific basis](#) for the relation between work and development of WMSDs and for addressing ergonomic problems in the workplace is well established.

### **What can be done to prevent WMSDs?**

[Real solutions](#) have been demonstrated in workplaces of all sizes across a broad range of industries. Many employers have developed effective ergonomics programs and common sense solutions to address WMSDs in their workplaces. Often WMSDs can be prevented by simple and inexpensive changes in the workplace. Adjusting the height of working surfaces, varying tasks for workers and encouraging short rest breaks can reduce risks. Reducing the size of items workers must lift or providing lifting equipment also may aid workers. Specially designed equipment, such as curved knives for poultry processors, may help.

### **What is OSHA doing to address WMSDs?**

OSHA is developing a program that calls for employers to establish ergonomics programs to prevent WMSDs. The agency has pledged to focus on jobs where injuries are high and solutions well demonstrated. In consultation with stakeholders, OSHA has identified significant problems for workers involved in production operations in manufacturing and manual handling throughout general industry. Job-related musculoskeletal disorders also occur in other jobs. At a minimum, employers that have workers experiencing injuries need to address the problem.

One size does not fit all. That is why OSHA has decided on the program approach. That's also why no one will ever be able to say that X number of repetitions or lifting X pounds will result in injury or conversely that Y number of repetitions or Y pounds will definitely NOT result in injury for anyone, any time, anywhere. However, many employers have proven that establishing a systematic program to address such issues as repetition, excessive force, awkward postures and heavy lifting, results in fewer injuries to workers.

### **What components should an ergonomics program include?**

OSHA has identified the following critical elements: management leadership and employee participation, hazard identification and information, job hazard analysis and control, employee training, medical management and program evaluation. The agency also intends to include in the rule a grandfather clause for existing programs.

The keys to success are simple: reduce repeated motions, forceful hand

exertions, prolonged bending or working above shoulder height. Reduce vibration. Rely on equipment-not backs-for heavy or repetitive lifting. Provide "micro" breaks to allow muscles to recover.

### **When will OSHA publish the ergonomics program rule?**

OSHA plans to publish its proposal in the *Federal Register* in September 1999. During the spring and summer, the rule will go through small business and governmental review. The [regulatory text](#) will be revised and the preamble, economic analyses and other supporting material developed. Our goal is to take public comments, hold hearings in several cities in late 1999 and publish a final rule in 2000.

[OSHA Ergonomics Chronology](#)

[Notes from September Stakeholder Meetings](#)

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**Revision Date: 03 September 1999**

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