

# OSHA'S REGULATORY ACTIVITIES AND PROCESSES REGARDING ERGONOMICS

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## HEARING

BEFORE THE

SUBCOMMITTEE ON NATIONAL ECONOMIC GROWTH,  
NATURAL RESOURCES, AND REGULATORY AFFAIRS

OF THE

COMMITTEE ON GOVERNMENT  
REFORM AND OVERSIGHT  
HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTH CONGRESS

FIRST SESSION

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JULY 12, 1995  
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# OSHA'S REGULATORY ACTIVITIES AND PROCESSES REGARDING ERGONOMICS

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TUESDAY, JULY 12, 1995

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON NATIONAL ECONOMIC GROWTH,  
NATURAL RESOURCES, AND REGULATORY AFFAIRS,  
COMMITTEE ON GOVERNMENT REFORM AND OVERSIGHT,  
*Washington, DC.*

The subcommittee met, pursuant to notice, at 10:15 a.m., in room 2154, Rayburn House Office Building, Hon. David M. McIntosh (chairman of the subcommittee) presiding.

Present: Representatives McIntosh, Gutknecht, Shadegg, Peterson, and Slaughter.

Also present: Representatives Owens and Meek.

Staff present: Mildred Webber, subcommittee staff director; Karen Barnes, professional staff member; David White, clerk; Bruce Gwinn, minority senior policy analyst; and Kevin Davis, minority professional staff member.

Mr. MCINTOSH. The subcommittee is called to order. Let me note for the record that a quorum is present.

Today's hearing will focus on OSHA's regulatory activities on ergonomics. Not only has the rulemaking itself been controversial, but OSHA's regulatory approach, especially in the face of congressional opposition, raises questions that need to be answered.

First, I want to commend two of my colleagues, Chris Shays, who chairs the Government Reform and Oversight Subcommittee on Human Resources and Intergovernmental Relations, which has oversight responsibility for the Department of Labor, and Cass Ballenger, who chairs the Education and Economic Opportunities Subcommittee on Work Force Protections.

Their leadership and excellent work has made great inroads on this issue. At this time, I would like to ask unanimous consent that a statement by Mr. Shays be entered into the record of this hearing. Seeing no objection, it is so ordered.

[The prepared statement of Hon. Christopher Shays follows:]

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STATEMENT FOR THE RECORD  
BY CONGRESSMAN CHRISTOPHER SHAYS  
CHAIRMAN, SUBCOMMITTEE ON HUMAN RESOURCES  
AND INTERGOVERNMENTAL RELATIONS  
COMMITTEE ON GOVERNMENT REFORM AND OVERSIGHT

BEFORE THE SUBCOMMITTEE ON NATIONAL ECONOMIC GROWTH,  
NATURAL RESOURCES, AND REGULATORY AFFAIRS HEARING  
JULY 12, 1995

Thank you Chairman McIntosh for allowing me to submit this statement for the record of today's Subcommittee hearing on the Occupational Safety and Health Administration's (OSHA) regulatory activities and processes regarding Ergonomics.

I chair a reform and oversight subcommittee with jurisdiction over those departments and agencies of government providing human resource services. One of those agencies is the Department of Labor, of which OSHA is a part.

I am concerned that OSHA's proposed rule on ergonomics is too broad, too vague and does not recognize that ergonomics as a science is still in its infancy. At this time, there is little scientific knowledge or consensus on what ergonomic problems are, how they are caused, or how they can be treated and prevented. Until this information is available, regulations regarding ergonomics are premature.

For example, OSHA's proposed rule does not recognize that an employee's injury may have been caused or exacerbated by non-work activities. Furthermore, no one is sure how much of an ergonomic problem may be caused by other non-work related factors such as the worker's physical fitness.

Page Two/Shays Statement/July 12, 1995

Until we have a better idea of the specific factors that cause ergonomic injuries, a broad rule such as the one proposed by OSHA may do little to prevent ergonomic injuries. It would, however, significantly increase paperwork costs for businesses -- and those costs will ultimately be passed on to workers through lower wages and consumers through higher prices.

Businesses already have a powerful incentive to address ergonomic injuries in the workplace. Where ergonomic injuries contribute to workers' compensation costs companies will want to take action on their own. Programs to reduce workers' compensation costs already include many of the safety standards contained in the proposed rule.

But rather than issue a rule that affects every business regardless of relative risk, OSHA's resources at this time might be better used by working with companies to identify the causes and solutions for ergonomic problems where they are known to exist.

OSHA should take a more cooperative and less prescriptive approach to ergonomics. The Human Resources and Intergovernmental Relations Subcommittee will continue its oversight responsibilities on this issue with that in mind.

Mr. MCINTOSH. OSHA's ergonomics rulemaking was identified early in the 104th Congress as a likely candidate to be covered by H.R. 450, the regulatory moratorium. Its 600-page draft, which we have a copy of here, is hard to miss. When you have a regulation that is that weighty and that thick, it is difficult for the American people not to take notice.

After an OSHA official publicly indicated that it was her intent to proceed with the regulation regardless of a moratorium, Congress passed a "stop work order," if you will, on this rulemaking, as part of H.R. 1158 and H.R. 1944, the 1995 rescission bills. That stop work order is now under consideration in the Senate.

We have a quotation that triggered a lot of this over there on the side. "If the legislation says the moratorium runs through December 31, our anticipation is that we would get the proposal out on January 1, unless it says, 'Do not work on ergonomics standards or go to jail.'"

Now, our intent is to change the mindset of the agency. I was pleased to see that Mr. Dear, last month, indicated that OSHA would be abandoning the rulemaking, and many Members of Congress now believe that ergonomics is a dead issue. But, as we see, Congress needs to continue the comprehensive review of regulations, and, in so doing, we are being told that ergonomics may, in fact, continue to be an issue at the Department of Labor.

Our question today: Is OSHA finished with its ergonomics efforts or not? As I am sure that the Assistant Secretary for OSHA well knows, their objectives in looking at these rulemakings should be twofold:

Its first objective should be to establish scientifically sound regulations that conform to statutory requirements and do more good than harm. As the physicians' oath reads, OSHA should "first do no harm." That is just common sense. Its second objective should be to issue regulations and conduct its enforcement and compliance in a manner that generates public confidence in the agency.

When OSHA fails its first objective, it further erodes public confidence. OSHA has, indeed, on the ergonomics rule, failed on both accounts.

Before we hear from our witnesses this morning, I would like to make it clear that I strongly believe in the need for safe workplaces. It is outrageous and grandstanding to say that our regulatory reform efforts are an attempt to gut worker safety or health. Our purpose is to be smart about protecting worker safety and not impose stupid or needless requirements or rules so costly that they cause the loss of valuable jobs. If the net result of work in this area is that more Americans are out of jobs, we have failed to truly protect worker safety.

What isn't clear is whether one single, sweeping, one-size-fits-all rulemaking is the key to ensuring safety, especially when grave questions still exist about the scientific basis for this regulation. If the ergonomics rulemaking has truly been terminated, then we must ensure that any backdoor efforts to enforce unsound ergonomics principles do not occur.

There are over 6 million businesses established, under OSHA's jurisdiction, including 4.4 million small businesses. These businesses employ about 96 million workers, and, as my colleagues



here on the committee know, Congress will soon fall under the coverage of the Occupational Safety and Health Act and of this particular standard, if any is adopted.

I want to refer briefly to a section of the draft proposal. To me, it is mindboggling to think about formally reviewing every one of the 96 million jobs for the ergonomic effects, but that is what the original rulemaking would have required to signal risk factors which were inherent in every job, as we can see on page 4 of the draft proposal.

It is also frightening to think about how many of these jobs may be eliminated before they are reviewed. For example, in OSHA's case against Pepperidge Farm, the company was in violation of ergonomics standards for the method in which its workers assembled Milano cookies. We brought the cookies here today so that everyone can see exactly what was issued.

Apparently, there were two processes at work here: one was "capping," putting the chocolate filling in the cookie; and the other was "cupping," or placing the two cookies in a paper cup for packaging and distribution. If such jobs were in violation of the ergonomics standards, then surely what the economy and the companies will do is replace them with robotics and other machines.

Other examples of ergonomics violations cited in the proposal include actions most workers perform daily. Workers would be prohibited from repeatedly pinching small paper clips, because it could possibly exert a 2-pound pressure in pinching that item, or twisting their necks in a way that would cradle a telephone receiver.

A questionnaire in the draft proposal asks employers of computer users if their employees are allowed to determine their own pace and discourages employers from using any incentives to work faster. In other words, employers would not be allowed to encourage productivity. If the ergonomics rulemaking is truly dead, we have saved more than just the enormous costs involved; we have potentially saved millions of jobs.

Because the United States continues moving forward as a service-based economy with greater competition from world markets, and because every job requires us, at some point, to sit, stand, walk, talk, move our hands, and increasingly use a computer, we will necessarily be engaged in repetitive activity. We need to learn more about the long-term impact of such activity on our health and safety before we attempt such a massive, sometimes silly regulatory effort.

There is a new thinking in Congress that is grounded on the principle that regulations should use common sense; they should be based on thorough risk assessments and good science; they should not cost American workers their jobs; and they should increase individual freedom in the workplace.

I want to thank the witnesses for coming today.

[The prepared statement of Hon. David M. McIntosh follows:]

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**OPENING STATEMENT**  
**THE HONORABLE DAVID M. MCINTOSH**

Hearing on OSHA's Regulatory Activities  
and Processes Regarding Ergonomics

July 12, 1995

Today's hearing will focus on OSHA's regulatory activities on ergonomics. Not only has the rulemaking itself been controversial, but OSHA's regulatory approach, especially in the face of Congressional opposition, raises questions that need to be answered. First, I want to commend two of my colleagues -- Chris Shays who chairs the Government Reform and Oversight Subcommittee on Human Resources and Intergovernmental Relations which has oversight responsibility for the Department of Labor, and Cass Ballenger who chairs the Education and Economic Opportunities Subcommittee on Workforce Protections. Their leadership and excellent work has made great inroads on this issue. At this time, I ask unanimous consent that a statement submitted by Mr. Shays be entered into the record of this hearing.

OSHA's Ergonomics rulemaking was identified early in the 104th Congress as a likely candidate for coverage by H.R. 450, the regulatory moratorium. It's 600+ page draft proposal is hard to miss. After an OSHA official publicly indicated her intent to defy the moratorium, Congress passed a "Stop Work Order" on this rulemaking as part of H.R. 1158 and H.R. 1944, the 1995 Repeal and Revisions Bill. That "Stop Work Order" is now under consideration in the Senate.

Last month, press accounts reported that OSHA had abandoned the rulemaking, and many members of Congress now believe that the Ergonomics issue is dead.

As Congress continues its review of comprehensive regulatory reform proposals in H.R. 9, S. 343, and other bills, it is important to establish the status of OSHA's Ergonomics regulatory activities. Are OSHA's Ergonomics efforts over or not?

As I am sure that the Assistant Secretary for OSHA well knows, OSHA's objectives should be two-fold:

Its first objective should be to establish scientifically sound regulations that conform to statutory requirements and that do more good than harm. As

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the physicians' oath reads, OSHA should "first do no harm." That is just common sense.

Its second objective should be to issue its regulations and conduct its enforcement and compliance in a manner that generates public confidence in OSHA. When OSHA fails in its first objective, it further erodes public confidence. OSHA has failed on both!

Before we hear from our witnesses this morning, I would like to make it clear that I strongly believe we need safe workplaces. It is outrageous grandstanding to say our regulatory reform efforts are an attempt to gut worker safety or health. Our purpose is to be smart about protecting worker safety -- and not impose stupid requirements or rules so costly that they cause loss of valuable jobs. If the net result of OSHA's work is that more Americans are out of jobs, it has failed to protect worker safety.

What isn't clear is whether one single, sweeping, one-size-fits-all rulemaking is the key to ensuring safety, especially when grave questions still exist about the scientific basis of the regulation. If the Ergonomics rulemaking has truly been terminated, then we must ensure that "backdoor" regulation to enforce unsound Ergonomics principles doesn't occur.

There are over 6 million business establishments under OSHA's jurisdiction, including over 4.4 million small businesses. These businesses employ more than 96 million workers. (And as my colleagues well know, Congress also will soon fall within coverage of the Occupational Safety and Health Act and of this particular standard when adopted.)

I want to refer briefly to a section of the draft proposal. It is mind-boggling to think about formally reviewing every one of those 96 million jobs for Ergonomic effects - - but that is what the original rulemaking would require according to the "signal risk factors" which are inherent in every job (p. 4, draft proposal). It is also frightening to think about how many of those jobs may be eliminated before they are reviewed.

For example, in OSHA's case against Pepperidge Farm, the company was in violation of Ergonomics standards for the method by which its workers assemble Milano cookies -- for "capping" or putting the two halves together, and "cupping" or placing the cookies in paper cups. If such jobs are in violation of an Ergonomics standard, will they then be replaced by machines? Other examples of Ergonomics violations cited in the proposal include actions most workers perform daily -- workers would be prohibited from repeatedly pinching small binder clips or twisting their necks in the way we all cradle a telephone receiver. A questionnaire in the draft proposal asks employers of computer users if their employees are allowed to determine their own pace, and discourages employers from using any incentives to work faster. In other words, employers would not be allowed to encourage productivity. If the Ergonomics rulemaking is truly dead, we have saved more than just the enormous cost involved.

Because the United States continues moving toward a service-based economy, with greater competition from world markets, and because every job requires us at some point to sit, stand, walk, talk, move our hands, and increasingly use a computer, we will necessarily be engaged in repetitive activity. We need to learn more about the long term impact of such activity on our health and safety before we attempt such a massive, sometimes silly regulatory effort.

There is a new thinking in Congress that is grounded on the principles that (1) regulations should use common sense, (2) they should be based on thorough risk assessments and good science, (3) they should not cost American workers their jobs, and (4) they should increase individual freedom.

I want to thank the witnesses for being here today.

Mr. MCINTOSH. Let me now turn to my colleagues.

Mr. PETERSON, do you have an opening statement?

Mr. PETERSON. Not much of one, Mr. Chairman. I apologize for being late. I didn't hear all of your statement.

Mr. MCINTOSH. No problem. It was a ringing one.

Mr. PETERSON. I guess I'm here today to hear more about this whole situation. It's a puzzle to me, I guess, how this has been hanging around as long as it has, and it has apparently been put forward by a number of different administrations. From what I know about what they are up to here, it doesn't make a whole lot of sense to me, but maybe there's something I don't understand.

I have to say that I am skeptical that any bureaucrat can sit around and try to figure out this sort of thing. It just seems to be kind of, you know, an unrealistic situation. So all I'm going to say is that I'm here to learn more about this and, I guess, am willing to be convinced that this makes some sense, although I'm pretty skeptical about the whole situation.

I appreciate your calling the hearing and look forward to hearing the testimony of the witnesses.

Mr. MCINTOSH. Thank you very much, Mr. Peterson.

Mr. Gutknecht or Mr. Shadegg, do you have an opening statement?

Mr. SHADEGG. I have no opening statement.

Mr. MCINTOSH. Ms. Meek, do you have an opening statement?

Ms. MEEK. No. Thank you.

Mr. MCINTOSH. Thank you very much.

Let's proceed with our first panel. If Mr. Dear could come forward and Mr. Woodward.

Mr. MCINTOSH. Chairman Clinger's policy is to ask that witnesses before our subcommittees be sworn in. If the witnesses would please rise and raise their right hands.

[Witnesses sworn.]

Mr. MCINTOSH. Let the record show the witnesses answered in the affirmative.

Welcome, Mr. Dear, we appreciate your coming today. If I could ask you to summarize your prepared statement and the whole statement would be put into the record for our consideration. Please proceed.

**STATEMENTS OF HON. JOSEPH A. DEAR, ASSISTANT SECRETARY OF LABOR FOR OCCUPATIONAL SAFETY AND HEALTH, U.S. DEPARTMENT OF LABOR; ACCOMPANIED BY JOSEPH M. WOODWARD, ASSOCIATE SOLICITOR, OCCUPATIONAL SAFETY AND HEALTH DIVISION, U.S. DEPARTMENT OF LABOR**

Mr. DEAR. Thank you, Mr. Chairman and members of the committee. I would be pleased to summarize and ask that my statement be put in the record, as well as supplemental information which we have also brought along.

I am delighted to discuss with the committee OSHA's attempts to address the problem of work-related musculoskeletal disorders and the application of ergonomics to their solution. Before I address this really important topic, I would like to make a few gen-

eral comments about the new directions that OSHA is taking in order to place this effort in a larger context.

In the past several months, you and other Members of Congress have heard lots of stories about OSHA. They tell of incompetent inspectors citing and fining employers thousands of dollars for nitpicky violations that appear to have nothing to do with worker safety and health.

Most of these stories, almost all of them, have no basis in fact, and they obscure a story which you may not be hearing, and that is that OSHA has succeeded in preventing injuries, illnesses, and deaths in America's workplaces, and that we are making significant changes in the agency now to improve its efficiency and effectiveness.

The plain truth is that OSHA saves lives. Since its creation in 1970, OSHA has performed invaluable services to millions of American workers and employers. Through the agency's protective standards and its enforcement program, as well as efforts by millions of responsible employers, the workplace fatality rate in the United States has declined significantly.

Looking at the 23-year period before OSHA was created, the average annual decline in fatalities was 139 per year. But since OSHA was created, that decline improved to 204 per year. Couple these numbers with the more rapid increase in employment since 1970, and the results are even more dramatic, an estimated 27,000 lives saved to 1993 alone. This is a 57-percent reduction in the rate of workplace fatalities since OSHA was created, and it is an unquestionable improvement.

But citing improvements and successes is not to say that the status quo is acceptable. OSHA is changing the way it does business. As announced by President Clinton on May 16, OSHA has begun regulatory reform initiatives to enhance safety, trim paperwork, and transform the agency. OSHA is working to carry out the President's commitment. The reforms are now being implemented and they are changing the agency's culture to ensure that we adequately protect workers without imposing unfair burdens on employers.

There are three elements to this strategy of improving OSHA's effectiveness. The first is giving employers a choice between a partnership or a traditional enforcement relationship. We want to help those employers who want help, to provide them with assistance. We want to recognize their effort in terms of how we work with them and how we may relieve them, in terms of penalties and citations, if they are making appropriate progress toward improving workplace safety and health.

But for those employers who disregard their obligation to provide a safe and healthy workplace—and, Mr. Chairman, the sad fact is, some still do—we will continue to vigorously enforce the law.

Our second principle is commonsense regulation. OSHA is changing its approach to regulations by eliminating or fixing confusing and out of date standards, by identifying clear and sensible priorities for new rules, and by employing performance-based approaches where feasible. As part of this effort, OSHA is going to rewrite many of its standards into plain language.

The third principle is focusing the agency on results, not red tape. Many employers have complained that OSHA inspectors care less about worker health and safety than they do about meeting perceived quotas for citations and penalties. Now, we have never used quotas, but we have measured our performance in terms of numbers of inspections, number of citations, and amount of penalty dollars collected, but not anymore. This year, this fiscal year, starting October 1, 1994, OSHA ended that practice.

I would be pleased, in the question and answer period, to elaborate, at your pleasure, on these initiatives further.

Let me turn now to the subject of the hearing, ergonomics. The problem is work-related musculoskeletal disorders; the solution is ergonomics. Ergonomics is the science of fitting the work to the worker rather than the worker to the work.

OSHA estimates this problem is huge, that work-related musculoskeletal disorders in the United States range from more than 700,000 lost workday injuries and illnesses, 30 percent of all the lost workdays reported to the Bureau of Labor Statistics, to more than 2.7 million annually awarded workers' compensation claims because employees work in jobs that are not properly designed. These jobs appear in all types of industries and in all sizes of facilities. Many of these disorders can be prevented by the application of ergonomics in the workplace.

Now, these occur in exposed workers in all parts of their bodies: the upper extremities, the back, the lower extremities. An example of the magnitude of the problem involves repeated trauma to the upper extremity, or that portion of the body above the waist, in forms such as carpal tunnel syndrome and shoulder tendinitis.

In 1993, employers reported 302,000 upper extremity repeated trauma cases, while in 1991 the number was only 22,000. That is a sevenfold increase, after adjusting for the size of the employer work force. In industries such as meat-packing, 13 out of every 100 workers report a work-related musculoskeletal disorder each year. In automotive assembly, it is 8 out of 100 each year. The number of work-related back injuries occurring every year is even larger. Industries reporting a large number of back injury cases include hospitals and personal care facilities.

Now, these disorders are the result of stresses to various parts of the body by the way work is performed. The positioning of the body and the type of physical work that must be done to complete the tasks of the job may cause persistent pain and lead to deterioration of affected joints, tissues, and muscles over time. The longer time the worker must remain in a fixed or awkward posture, exert force, repeat the same movements, experience vibration, or handle heavy items, the greater the chance a disorder will occur.

These job-related stresses are referred to as workplace risk factors. The scientific literature demonstrates that exposures to these risk factors, particularly in combination with each other, significantly increases employees' risk of developing a work-related musculoskeletal disorder.

In economic terms, it has been estimated that up to one-third, or \$20 billion, of employer-paid workers' compensation benefits and premiums is associated with work-related musculoskeletal dis-

orders. In addition, these problems cause a stunning personal toll on workers who experience their effects.

Now, we have heard people say that OSHA is promulgating a comfort standard, that every minor ache and pain in the workplace will now be regulated. This is simply not true. Any proposed ergonomics standard would focus on those jobs with the highest risks.

The workers whose livelihoods have been curtailed as a result of these disorders, who have suffered permanent disability, and whose quality of life has been drastically impaired deserve attention to this compelling and serious occupational health problem. We will submit for the record letters, a sampling of the over 1,000 letters we have received from workers who are afflicted with this problem and who have asked for action.

Last year, the Wall Street Journal published a story by Tony Horwitz, who described his experience working in a poultry processing facility, among others. Mr. Horwitz won a Pulitzer Prize for this article. He experienced firsthand the difficult conditions under which work in poultry processing facilities is performed.

He said, in part, regarding workers in a poultry plant, "Packed tightly and working quickly with knives and scissors, workers often cut themselves and others. Floors that are slick with wash water and chicken bits add to the hazard. And though most tasks appear at first undemanding, if unpleasant, they quickly become grueling as the same motion is repeated at rapid speed for 8 hours or more."

As I said, the problem is work-related musculoskeletal disorders, and the solution is bringing ergonomic principles to bear in the workplace. The evidence that OSHA has collected over the past few years indicates the problem is significant and suggests that there is a strong basis in medical science to initiate rulemaking in this area.

This evidence has led to the agency's conclusion that a common-sense strategy regarding ergonomically related hazards must be developed. This strategy should consist of consultation, training and education, labor and industry partnerships, sensible and appropriate regulatory approaches, and a sensible enforcement and litigation strategy. In other words, a balanced approach.

In fact, many employers have recognized these problems and have implemented successful solutions, household name companies like AT&T, du Pont, Hewlett-Packard, and many others. In the supplement to the record we have 131 case studies from American industry of successful interventions to reduce musculoskeletal disorders using ergonomic principles. These employers reported increased productivity, reduced workers' compensation premiums, decreased absenteeism and turnover, and increased employee morale.

Now, I have made ergonomics a priority during my time as Assistant Secretary, but this effort did not start with my tenure in the agency. In fact, OSHA has been actively pursuing issues related to ergonomics for 15 years. Beginning in 1988, in the Reagan administration, OSHA entered into a number of corporate-wide settlement agreements with large companies who had multiple facilities with similar operations.

Two industries received considerable focus in that regard: meat-packing and automobile manufacturing. I think it is interesting to



note that, according to the latest Bureau of Labor Statistics figures, these two industries have shown decreasing rates of repeated trauma disorders caused, in large part, we believe, by the programs these employers implemented as a result of OSHA's enforcement activities.

The issue of promulgating a standard to address work-related musculoskeletal disorders has been under consideration for some time, as well. While there have been voluntary activities to address some of the problems, the ever-increasing number of reported cases appears to indicate that employers need more than guidance to address these concerns.

In 1991, the Secretary of Labor was petitioned for an emergency temporary standard. The Department denied the request for an emergency temporary standard, but Secretary Martin said at the time, in April 1992, that "OSHA agrees that available information supports initiation of section 6(b) rulemaking to address ergonomic hazards," and, further, that "OSHA agrees that ergonomic hazards are well-recognized occupational hazards."

As a result, OSHA published an advance notice of proposed rulemaking in August 1992. My distinguished predecessor, Dorothy Strunk, who is here this morning, said at the time, "The continuing rise in the incidence of cumulative trauma disorders gives credibility to our judgment that emphasizing these problems in our enforcement and standard-setting efforts is worthwhile and necessary."

One of the criticisms among the many that we have heard from opponents is, there is not enough science to support the standard, that the agency doesn't have sufficient information available. These arguments are not convincing, given the large amount of scientific data available about the problem and the solid evidence regarding the solution.

Now, there is bound to be controversy in any significant regulatory rulemaking. One of the purposes of the public hearing process is to bring all those views to bear as an agency makes a decision.

OSHA's job is to protect employees to the extent feasible, based on the best available evidence. In some cases, this involves a more limited data base than we have for ergonomics and requires complicated extrapolation from animal studies to the worker population. That is not the issue we are addressing here.

Our evidence is based on the real experience of human beings in the workplace, actual statistics reported by employers, by workers' compensation insurers about injuries which occurred on the job. This is unusual in health standard setting that we have this much information about the direct experience of real people, real workers on the job.

Now, turning to the next step, we are continuing to work on regulatory approaches to these problems as well as other approaches. We are considering what type of proposal we should issue. In some sense, in this hearing I find myself defending a proposal we haven't made. We are considering what proposal to make.

Making a proposal would allow this iterative process of reading the literature, talking with employers and workers and professional experts, showing them drafts, getting comments, refining the drafts

to go forward in the structured public hearing process that agency rulemaking must go through. This would allow all interested parties to bring their views into the record.

OSHA, when it considers this, must take all of that information on the record and make its decision based on substantial evidence on the record taken as a whole. We also need to address voluntary and nonregulatory approaches to this problem, cooperative partnerships, further education, more research, and develop, as I said, a balanced approach to rulemaking.

We have made a concerted effort to develop an ergonomic proposal using many of the concepts that are now being considered in the various regulatory reform bills the Congress is considering. We have made a preliminary assessment of the costs and benefits of the regulatory alternatives, and we believe the benefits, even when conservatively estimated, significantly justify or, dare I say, outweigh the costs.

An initial risk assessment has been conducted and suggests that workers are exposed to significant risk. These studies have been done using currently accepted scientific methodology. Extensive efforts have been made to obtain public comment and professional review of the documents at an early stage. We would look forward to the rigorous peer review which typically follows publication of an OSHA proposal.

Following the publication of the proposal, there would be a period for written comments on the proposal and a public hearing to allow oral testimony and questioning among all the parties about the basis of the information that they used to conclude their various policy recommendations, and, finally, a posthearing comment period that would also be able to provide further information for the record.

Despite all of our careful work to date and our desire to take this to the next stage, efforts are being made to stop the rulemaking. OSHA believes that the best way to proceed is through a thorough public debate on this critical problem and to arrive at the most appropriate, effective, and feasible solution, and the way to do this is through an open deliberative process.

Intervention at an early stage in this process precludes a majority of the public from participation and may prejudice the issue without regard to the facts. I don't think this is in the interest of either good regulation, good employment practices, or good science.

OSHA would be happy to provide any additional information we have to further these discussions. Ultimately, we believe that the well-founded and balanced public process of addressing ergonomics should be allowed to continue, in the interest of protecting workers and for the benefit of concerned employers, as well.

Mr. Chairman, thank you. I would be pleased to answer questions if you have any.

[The prepared statement of Mr. Dear follows:]

**STATEMENT OF JOSEPH A. DEAR  
ASSISTANT SECRETARY OF LABOR  
FOR OCCUPATIONAL SAFETY AND HEALTH  
BEFORE THE  
SUBCOMMITTEE ON NATIONAL ECONOMIC GROWTH,  
NATURAL RESOURCES AND REGULATORY AFFAIRS  
COMMITTEE ON GOVERNMENT REFORM AND OVERSIGHT  
U.S. HOUSE OF REPRESENTATIVES  
JULY 12, 1995**

Mr. Chairman and Members of the Subcommittee:

Thank you for this opportunity to discuss the Occupational Safety and Health Administration's activities regarding ergonomically-related hazards in the workplace. Before discussing this important topic, I would like to make a few general comments about the major changes which are taking place within OSHA.

In the past few months, you have heard a lot of troubling stories about OSHA. These stories tell of incompetent inspectors who fine business thousands of dollars for nitpicky violations that have little to do with worker safety. But most of these stories have little basis in fact. Moreover, they fail to acknowledge OSHA's successes in preventing injuries and illnesses, or the improvements the agency has made recently.

The plain truth is OSHA saves lives. Since its creation in 1970, OSHA has performed an invaluable service to millions of America's working families. Through the agency's protective standards and enforcement program, as well as efforts by thousands of responsible employers, the workplace fatality rate has declined substantially. Looking at the 23-year period before OSHA, the average annual decline in fatalities was 139; but since

OSHA the decline has improved to 204. Couple these numbers with a more rapid increase in employment since 1970, and the results are even more dramatic -- an estimated 27,700 lives saved in 1993 alone. This 57 percent reduction in the rate of workplace fatalities since OSHA was created is an unquestionable improvement.

OSHA is changing the way it does business. As announced by President Clinton on May 16, OSHA has begun regulatory reform initiatives to enhance safety, trim paperwork, and transform the agency. OSHA is working to carry out the President's commitment. The reforms which are now being implemented are changing the agency's culture -- to ensure that we adequately protect workers without imposing unfair burdens on employers.

In order to accomplish this, we are making every effort to involve the agency's stakeholders in our regulatory process. For instance, OSHA has been working closely with business and labor to develop revised recordkeeping requirements, utilizing the services of the Keystone Group to facilitate the process. OSHA is also undertaking a systematic effort to identify the leading causes of workplace injury, illness and death, in order to establish the agency's rulemaking priorities. We have solicited input from stakeholders through mailings, a Federal Register notice and a series of meetings. We have received more than 100 written comments and direct participation of nearly 200 representatives of labor, industry, professional and academic organizations. When completed, the priority list will reflect a

true crosscut of public and private views of where the agency should focus its rulemaking efforts.

#### **The New OSHA**

There are three core principles guiding the agency's reform efforts. First, a choice between partnership and traditional enforcement. OSHA has begun to refocus its enforcement and compliance assistance efforts. We believe that our mission to save lives and prevent injuries can be enhanced by making a better effort to identify good actors and treat them differently from bad actors. For employers who have made safety and health a priority, and who seek a productive partnership, we will offer incentives, compliance assistance, training and education -- and we will recognize their good efforts. But for those employers who disregard their workers' safety and health -- and Mr. Chairman, the sad fact is that some still do -- we will continue to vigorously enforce the law.

The second principle: common sense regulation. OSHA is changing its approach to regulations by eliminating or fixing out-of-date and confusing standards, by identifying clear and sensible priorities for new rules, and by employing "performance-based" approaches where feasible. As part of its effort, OSHA will rewrite many of its standards in plain language.

The third principle: results -- not red tape. Many employers have complained that OSHA inspectors care less about worker safety and health than they do about meeting perceived

"quotas" for citations and penalties. While OSHA has never used quotas, it has in the past used citations and penalties as performance measures. But not anymore. This year, the new OSHA ended this practice.

A major success story for OSHA in its attempt to work more closely with employers and employees is the "Maine 200" concept. In Maine, OSHA identified the 200 employers with the highest number of injuries and illnesses, and gave them the choice of participating in a new program or sticking with the traditional enforcement approach. Nearly all chose to work cooperatively with OSHA to establish safety and health programs. Doing the job themselves, these employers identified about fourteen times as many hazards as OSHA's small staff of inspectors could have found.

I would be pleased to elaborate on these initiatives during the question and answer period.

#### OSHA's Ergonomics Initiatives

We also welcome the opportunity to discuss the subject of today's hearing -- ergonomics -- because it too has generated myths and fables that have been widely disseminated. The first myth is that OSHA is on the verge of publishing a final rule; in fact, OSHA is working on a proposal to permit a full and open public discussion. While some OSHA rulemakings may generate broadly divergent views among interested parties, the best way to ensure full and fair debate on such issues is by the publishing

of a proposed rule. OSHA believes that this first step is critical. It represents the agency's initiation of the formal public participation process, the only process that assures that everyone who is interested will have the opportunity to provide written comments and oral testimony. In this sense, the process of publishing a proposal represents the ultimate peer review of OSHA's data collection and analysis, as well as the underlying science.

#### Scope of the Problem

OSHA estimates that work-related musculoskeletal disorders in the United States range from more than 700,000 lost workday injuries and illnesses (30% of the all lost workdays reported to BLS) to more than 2.7 million annually awarded workers compensation claims because employees work in jobs that are not properly designed. These jobs appear in all types of industries and in all sizes of facilities. Many of these disorders can be prevented by the application of ergonomics in the workplace.

They occur in exposed workers in all parts of their bodies-- the upper extremity, lower extremity, and back. An example of the magnitude of the problem involves repeated trauma to the upper extremity, or that portion of the body above the waist, in forms such as carpal tunnel syndrome and shoulder tendonitis. In 1993, employers reported 302,000 upper extremity repeated trauma cases, for example, while in 1981, the number was only 22,700. Adjusting the data to reflect changes in the size of the employee

population indicates that there has been a greater than 7-fold increase in such cases in the last ten years. In industries such as meat packing, 13 out of every 100 workers report a work-related musculoskeletal disorder related to repeated trauma each year. In automotive assembly, 8 out of every 100 workers are affected.

The number of work-related back injuries occurring every year is even larger. Industries reporting a large number of cases of back injuries include hospitals and personal care facilities.

These disorders are the result of stresses to various body parts caused by the way the work is performed. The positioning of the body and the type of physical work that must be done to complete the tasks of a job may cause persistent pain and lead to deterioration of the affected joints, tissues, and muscles over time. The longer time the worker must maintain a fixed or awkward posture, exert force, repeat the same movements, experience vibration, or handle heavy items, the greater the chance that such a disorder will occur. These job-related stresses are referred to as "workplace risk factors," and the scientific literature demonstrates that exposure to these risk factors, particularly in combination with each other, significantly increases an employee's risk of developing a work-related musculoskeletal disorder.

One dramatic illustration of the societal effect of these disorders is the skyrocketing cost of the workers' compensation



claims related to them. Work-related musculoskeletal disorders now account for an astounding one out of every three dollars spent on workers' compensation. It is estimated that employers spend \$20 billion a year in direct costs for workers' compensation, and up to five times that much for indirect costs, such as those associated with hiring and training replacement workers.

In addition to these monetary effects, these disorders often impose a stunning personal toll on workers who experience their effects. We have heard people say that OSHA is promulgating a "comfort" standard, and that every minor ache and pain in the workplace will now be regulated. This is simply not true. Any proposed ergonomics standard would focus on those jobs with the highest risks. The workers whose livelihoods have been curtailed as a result of these disorders, who have suffered permanent disability, and whose quality of life has been drastically impaired, deserve attention to this compelling and serious occupational health problem.

The Department of Labor has received over a thousand letters and more than 10,000 petition signatures from workers asking OSHA to promulgate a standard to prevent work-related musculoskeletal disorders. There has rarely been such broad grass roots demand for an OSHA standard in the agency's 25-year history. This far-reaching support is due to the fact that ergonomic-related disorders are widespread, crossing over all industries and all

levels of education. We have provided copies of some of these letters for the record.

Many of the most severely impacted employees are those who are also the most disadvantaged members of the workforce. They have little education or training to allow them to perform other types of work. Their wages are low and thus compensation for injuries, when received, is even lower. And they are frequently women or members of other minority groups. Garment workers are an example of a worker population that has serious problems. One story we received told of a garment worker who stitched shoulder pads, and whose pay was determined by the number of pieces completed. In order to earn enough money, she had to complete as many pieces as possible. She eventually reached the point where she could hardly move by the end of the day. As the damage to her body progressed, all aspects of her life were affected. Now she not only cannot work, but is unable to comb her hair, button her clothes, or brush her teeth.

Late last year, Wall Street Journal reporter, Tony Horwitz, described his experience working in poultry processing facilities in an article that recently won a Pulitzer prize. Mr. Horwitz experienced firsthand the difficult conditions under which this work is performed: "Packed tightly and working quickly with knives and scissors, workers often cut themselves and others. Floors that are slick with wash water and chicken bits add to the hazard. And though most tasks at first appear undemanding, if unpleasant, they quickly become grueling as the same motion is

repeated, at rapid speed, for eight hours or more." He further noted that: "The work was often so fast-paced that it took on a zany chaos, with arms and boxes and poultry flying in every direction." Poultry processing workers often develop carpal tunnel syndrome as a result of their working conditions.

Other workers who are severely impacted are those whose jobs require heavy lifting or moving. Nursing home workers are an example of these--particularly those who must handle patients. For example, one such worker whose back was injured twice reports she is now experiencing chronic pain, and is unable to perform such personal activities as grocery shopping, lifting her grandchild, or doing housework.

One of the ironies of the increased use of computers is that highly skilled and educated workers are now also subject to the development of these occupational disorders. For example, a number of journalists or writers have found their lives and livelihood affected by carpal tunnel syndrome developed from keyboard use at work. One wrote an article she sent to us which described her inability, at the age of 26, "to drive a car, type, lift anything heavy, or even write with a ballpoint pen."

OSHA believes that the number and severity of these disorders require that something be done to prevent them from occurring. As a physician wrote to OSHA in a letter regarding his experiences treating patients with work-related musculoskeletal disorders: "The gradual shrinkage of virtually all activities of daily living leads to a pitifully circumscribed

life style that is difficult for many to bear." Work conditions which lead to such disorders cannot be considered a "safe and healthful workplace," nor are they trivial matters of discomfort.

#### **What is "Ergonomics?"**

Ergonomics is the science which prevents injuries to workers by fitting the job to the person, rather than the person to the job. An ergonomic evaluation would examine the jobs or tasks, the workstation, equipment used, and processes needed to complete the work. Then these elements of the work environment can be designed or modified so that workers can perform safely. When a job is designed without considering the worker, it will not be done in the most efficient or effective manner. Use of ergonomics design principles is good for business--both in terms of productivity of the work process and quality of the product. "Ergonomics" is thus the *solution*--not the *problem*.

#### **Availability of Solutions**

The evidence OSHA has collected over the past few years indicates that the problem is significant and suggests that there is a strong basis in medical science to initiate rulemaking in this area. This evidence has led to the agency's conclusion that a common sense strategy regarding ergonomically-related hazards must be developed. OSHA believes this strategy should consist of consultation, training and education, labor and industry

partnerships, sensible and appropriate regulatory approaches and a sensible enforcement/litigation strategy.

In fact, many employers have recognized the problems and implemented successful solutions. OSHA has met with many companies, such as AT&T, Dupont, and Hewlett-Packard, that have voluntarily implemented ergonomics programs. The agency has also collected dozens of success stories from companies which report significant benefits from their programs. Savings in workers' compensation costs are generally a large part of the measurable benefits. In addition, such employers report increased productivity, decreased absenteeism and turnover, and increased employee morale. We have provided for the record of this hearing a summary of a number of these success stories.

There seems to be a misconception that ergonomics programs always entail complete redesign of the workplace or the way the work is performed. In fact, many of the effective control measures implemented by employers are simple and cheap. For example, the employee may simply need a rubber mat to stand on while working. Or a rigid chair may be replaced by one that is adjustable. Complete redesign of the entire work process is rarely required to achieve significant reductions in risks. Employees familiar with the process are often best able to both define the cause of the problem and suggest simple solutions.

### **History of OSHA's Involvement in Ergonomics**

While I have made development of a proposed standard to address ergonomically-related hazards a priority in my tenure as Assistant Secretary, the identification of the problem and the determination that there is a need for a standard and other non-regulatory activities were made by my predecessors. In fact, OSHA has been actively pursuing issues related to ergonomics for more than 15 years.

The primary tool available to the agency in the absence of a standard is the employer's responsibility under the general duty clause, section 5(a)(1) of the Occupational Safety and Health Act, to provide a safe and healthful workplace. In the late 1970's, the agency began to issue general duty clause citations to employers in various industries where work-related musculoskeletal disorders were occurring. Over 400 cases have been completed, and the vast majority of them were not contested by the cited employers. Thus these employers accepted the existence of a problem, and were able to abate the hazards using available feasible methods. OSHA began training compliance officers and consultants in ergonomics in 1983, issued guidance for its field staff in 1986 and 1987, and established ergonomic coordinators in the regional offices at that time.

Beginning in 1988, under the Reagan Administration, OSHA entered into a number of corporate-wide settlement agreements with large companies which had multiple facilities with similar operations. Two industries received considerable focus in that

regard--red meatpacking and automobile manufacturing. It is interesting to note that according to the latest BLS statistics, these two industries have shown decreasing rates of repeated trauma disorders--caused in large part, we believe, by the programs these employers have implemented as a result of OSHA's enforcement activities.

OSHA has also issued a number of written materials in response to employers' requests for information about ergonomics. In 1990, the agency provided Ergonomics Program Management Guidelines for Meatpacking Plants. While this publication included some information that was specific to meatpacking operations, it also provided general guidance for the elements of a comprehensive ergonomic safety and health program and has been widely used by employers in other industries. Also in 1990, the agency began publishing "Ergo Facts," which are short descriptions of actual problems found in a workplace with solutions that work. In 1991, the agency published two brochures to describe ergonomics and to address work with video display terminals. OSHA also funded seven ergonomic training grants in 1994.

The issue of promulgating a standard to address work-related musculoskeletal disorders has been under consideration for some years. While there have been voluntary activities to address some of the problems, the ever-increasing number of reported cases appears to indicate that employers need more guidance to address these concerns. In 1991, a coalition of unions

petitioned the Secretary of Labor for an emergency temporary standard. The Secretary replied in 1992 that the issue did not meet the test for an emergency temporary standard, but that the agency had concluded that there was sufficient evidence available to support the need for developing a standard. Secretary of Labor Lynn Martin stated in April 1992 that: "OSHA agrees that available information ... supports initiation of section 6(b) rulemaking to address ergonomic hazards.... OSHA agrees that ergonomic hazards are well recognized occupational hazards."

As a result, OSHA published an advance notice of proposed rulemaking (ANPR) in August 1992, during the Bush Administration. In support of this action, my predecessor, Acting Assistant Secretary Dorothy Strunk, said: "The continuing rise in the incidence of cumulative trauma illnesses gives credibility to our judgment that emphasizing these problems in our enforcement and standard setting efforts is worthwhile and necessary." The ANPR described some of the information available regarding the extent of the problem, and asked a series of questions to elicit information from the public about the components of existing programs and what people thought should be included in a proposed standard. OSHA received almost 300 comments in response to the advance notice. These comments included significant information about existing programs, as well as many suggestions for the contents of a proposed standard. The comments are part of the public record of this rulemaking.



In addition to the public comments, OSHA has reviewed an extensive selection of scientific literature and other information related to ergonomics, such as the BLS statistics previously described and workers' compensation data regarding accepted claims for work-related musculoskeletal disorders, to form the basis for development of a proposed standard. Literally thousands of articles have been identified and reviewed. In addition, OSHA conducted a computer-assisted telephone survey of more than 3,200 establishments in order to determine current practices in industry. It is the largest data base available regarding the extent of workplace risk factors present in various jobs and industries, and provides indications of industry's response to the problems identified. OSHA has supplemented the survey results by conducting site visits to establishments with programs, and reviewing available case studies.

One of the criticisms we have heard from opponents of this rulemaking is that there is not enough "science" to support the standard, or that the agency does not have sufficient information available. We do not find these arguments convincing given the large amount of available literature and data much of which provides solid evidence regarding this problem, although the conclusions of the available literature and data are not entirely uniform. OSHA's job is to protect employees to the extent feasible, based on the best available evidence. In some cases, this involves a more limited data base than we have for

ergonomics, and requires complicated extrapolation from animal data to the worker population.

In this situation, however, our evidence is from human experience since it is based on actual cases reported by employers to BLS, or accepted by various state workers' compensation systems as work-related disorders. This is unusual in the area of occupational health effects, which are typically widely underreported. In addition, there are extensive epidemiological studies that confirm the problem, indicate that it is even more prevalent than the reported cases would indicate, and identify the risk factors that are associated with the development of disorders. OSHA has based its preliminary proposals for specific action to be taken in order to address problems of work-related musculoskeletal disorders based on the collective weight of this evidence. I would be pleased to provide a listing of such studies for the Committee at your request.

Would more information or research be helpful? Of course. But does that mean the agency should wait to address this issue? We don't believe it does. The evidence already indicates that employees are at significant risk of developing work-related musculoskeletal disorders, and that there are existing methods to protect them. It is time to ensure that protection occurs. Does OSHA have all the answers to the questions concerning the appropriate approach to take to protect workers? No, we don't.

But the rulemaking process is designed to elicit help from the public in ascertaining the approach to take in the final rule.

OSHA has released to the public not only the pre-proposal draft of the standard, but significant portions of the underlying data review and analysis. The documents released include a detailed summary of the health effects, with cites to the scientific literature. In addition to providing the written text to stakeholders, the draft documents were made available on the Department's computer bulletin board. Over 4,825 copies have been downloaded from this service. OSHA also arranged to make the draft standard available on the Internet through ErgoWeb--an ergonomics project run by the University of Utah. The University arranged the access so that readers could comment on the draft provisions and provide feedback to OSHA.

In addition to its internal analysis of the available data, OSHA has conducted one of the most extensive outreach campaigns on a draft standard in its pre-proposal stage to obtain public input. This has included review of various parts of the documents OSHA has developed by professionals in the field (for example, physicians and nurses have reviewed the medical management provisions and accompanying appendix); having employers "field test" some provisions to see if they work from a practical standpoint; and conducting stakeholder meetings to obtain information regarding what should be in the standard, as well as feedback regarding what OSHA included in the draft proposal.

Based on the questions you posed to OSHA, these stakeholder meetings appear to be of particular interest. We have provided information to you regarding the participants and the details of the meetings. While we have found the pre-proposal stakeholder meetings to be useful and helpful, they are no substitute for the full exchange of information that occurs in the public rulemaking process. We made every effort to include as many interested parties as we could, and to have as many meetings as possible, to address a broad range of concerns. But with an issue that affects as many employers and employees as this one does, all over the country, we only reached a limited number of people and organizations directly.

However, as I mentioned at the outset, the rulemaking process following publication of a proposed rule is the best and broadest opportunity for public input. It is open to any and every interested party. It can also give the other parties an opportunity to read or hear what each other has to say about the issues, and address these concerns in subsequent submissions.

#### **The Next Steps**

In terms of a regulatory approach, we are considering the next step, publication of a proposal. This would allow the continuation of the iterative process that is inherent in rulemaking--that OSHA refines and improves the approach as a result of public response and additional information. The agency could then prepare the most sensible and appropriate final rule

possible based on consideration of the public record developed--protecting employees in a manner that is effective and feasible.

However, OSHA is also pursuing non-regulatory approaches to address the prevention of work-related musculoskeletal disorders. As the President announced in his report, The New OSHA: Reinventing Worker Safety and Health, the agency will be developing a comprehensive strategy for activities related to ergonomics. The plan is to schedule and conduct stakeholder meetings to obtain input about a common sense strategy to the issue that would include consultation, training and education, labor and industry partnerships, and sensible enforcement/litigation. These meetings will take place during the next few months. Subsequently, OSHA will be developing the strategy by the end of this year.

#### **Conclusion**

We believe that OSHA has made a concerted effort to develop an ergonomics proposal using many of the concepts that are now being considered in the regulatory reform bills. The agency has made a preliminary assessment of the costs and benefits of the regulatory alternatives, and believes that the benefits--even when conservatively estimated--significantly outweigh the costs. An initial risk assessment has been conducted, and suggests that workers may be at significant risk. These studies have used currently accepted scientific methodology. Extensive efforts have been made to obtain public input and professional review of

the documents at an early stage. We would look forward to the rigorous peer review which typically follows publication of an OSHA proposal. Following publication of the proposal, there would be a period for written comments, and a public hearing to allow oral testimony. A post-hearing comment period would also allow hearing participants to provide additional information, and their summaries of the proceedings.

Yet despite this careful process, efforts are being made to stop the rulemaking. OSHA believes that the best way to conduct a thorough public debate on this critical problem, and to arrive at the most appropriate, effective and feasible solution, is to proceed with our open, deliberative process. But intervention at a very early stage in the process precludes the majority of the public from participation, and may prejudice the issue without regard to the facts. This is not in the interest of either good regulation or good science.

OSHA would be happy to provide any additional information we have to further these discussions. Ultimately, however, we believe that the well-founded and balanced public process of addressing ergonomics should be allowed to continue in the interest of protecting workers and for the benefit of concerned employers as well.

Mr. MCINTOSH. Thank you, Mr. Dear.

Let me ask Mr. Woodward if you have any comments you would like to make.

Mr. WOODWARD. I have no statement.

Mr. MCINTOSH. OK. Thank you both for coming.

Let me first, I guess, make a statement and then go into some of the questions I have. At the beginning, you talked a little bit about OSHA's mission, generally, and while it may be the case that you and the President feel that things are changing, I can assure you that the constituents that I talk to in Indiana do not think that is the case. There is a disconnect somewhere along the line.

When I was home over the 4th of July, I met with several restaurant owners, and one of them told me a very recent episode where they tried to construct a new restaurant—they weren't using a union contractor—and the OSHA inspector basically sat there all day, waited for any problem, and cited them with more and more citations. So the message isn't getting through to the field, and something needs to be done about that. That is a general problem and one that I think other committees will end up addressing.

In terms of ergonomics, you mentioned that you do plan to continue looking at this rulemaking. My question there is, is the plan to continue using the proposal that was put forward in the public for discussion earlier this year, or has that been scrapped? What is the status of that, and what are the processes that you all plan to be using in developing that?

Mr. DEAR. We have worked a long time, as I indicated, for years, developing a proposal. We have recently taken out a draft of the proposal and a lot of supplementary information, the health effects analysis, for public comment from labor, business, and professional organizations. We are currently assessing the comments we received as a result of those and deciding what the appropriate next step would be, in terms of modification of the proposal.

In terms of your basic question, if the approach which identifies risk factors which contribute to the incidence of musculoskeletal disorders, and developing a performance-based standard to reduce the risk factors, as a way of eliminating those injuries, is the basic model we are using, the answer is yes. But there are a host of policy questions which are available around using that approach to solving this problem.

Mr. MCINTOSH. So the proposal that is being circulated, for somebody who wanted to have an idea of what the Government is looking at or thinking about and working on, for all intents and purposes, that is still the working paper that the agency is using, as it considers whether or not to issue a rule?

Mr. DEAR. We circulated a proposal last September in an outline form. We modified that proposal and circulated a much more thorough draft, including 26 pages of regulatory text, which specifically laid out and allowed everybody to comment on that. We got a variety of views based on that.

Some folks thought this was not ready, and you are going to hear from some of them today. Other folks said, "Why are you taking this out for comment? Just publish the darn thing and get on. People are being hurt every day, and the delay means more injury."

We will take the comments we have received; we are analyzing them now. If we have the opportunity to develop a proposal and publish it, we will do that, but we will do that when we have developed a standard which, in my judgment and the judgment of the Secretary, is balanced and is a sensible strategy that has support from reasonable people.

Mr. MCINTOSH. I don't mean to be putting words in your mouth, but given between a yes and a no, the draft proposal is the working draft that you are using?

Mr. DEAR. I have to end up somewhere between that yes and no. It's being modified. I don't know what the ultimate modification is, so I can't tell you if it's more or less like what we saw in March. The basic model—I don't want to be obscure—the basic model, that risk factors, like repetition, force, posture, and lifting heavy objects, contribute to work-related musculoskeletal disorders, and that the solution involves reducing or eliminating the risk factors, that basic model is at the heart of the proposal; sure.

Mr. MCINTOSH. Let's turn to that a little bit, then. Would you say that you continue to take the approach that every job site should be surveyed to determine whether or not those risk factors are present?

Mr. DEAR. No, no. You don't want to create a regulatory obligation where there is no problem. That's one of the major changes between the September draft and the March draft.

Mr. MCINTOSH. How do you determine where there is a problem?

Mr. DEAR. If you have injuries, if you have worker complaints, if you have, by observation, work operations that involve these risk factors. I believe everybody is knowledgeable enough, either as a worker, about what they do, or employers, about how their operations go, to make an initial assessment.

Mr. MCINTOSH. So each employer or each employee would make an assessment of the work?

Mr. DEAR. It's the employer's obligation. The best ergonomics programs always involve workers in identifying solutions.

Mr. MCINTOSH. But the obligation is on the employer to survey their work sites and determine whether they think there might be a problem?

Mr. DEAR. That's true of every OSHA standard. That's a basic obligation under the act.

Mr. MCINTOSH. But it would be a general obligation, and then the specific factors you would only apply once you determine there potentially was a problem?

Mr. DEAR. If you have no problem, you have no obligation. That's clear. Just that one—

Mr. MCINTOSH. My question is, what obligation do you have to determine whether you have a problem?

Mr. DEAR. Simple observation of the workplace. Do you have any of these risk factors? Do you have any injuries or illnesses?

Mr. MCINTOSH. And these observations could be second-guessed by an OSHA inspector?

Mr. DEAR. Second-guessed, in the sense of—

Mr. MCINTOSH. If an inspection occurred at the work site, and the OSHA inspector disagreed with the observation, would there be a liability attached to that?



Mr. DEAR. We don't have a standard which we are enforcing. It's difficult to answer in terms of how it would be done. Are there disagreements between OSHA inspectors and employers about citations under current standards? Yes. Is there any new standard likely to continue that issue? Certainly. There are lots of informal means for resolving that type of discrepancy.

Let me note that about a million employers have to keep records of their injury and illness, which they report to the Bureau of Labor Statistics. Almost every State requires workers' compensation insurance, and most of those States have provisions for providing benefits in cases of work-related musculoskeletal disorders. Both of those would create information employers would have, without any new regulatory obligation on OSHA's part, that they have, potentially, a problem which may trigger an obligation, if there is a standard.

Mr. MCINTOSH. When we get back—I want to recess so that we can go and vote—I want to pursue that a little further, because, to me, the statement that you are only going to have to address ergonomics issues where there is a problem begs much of the problem with this rulemaking, which is that people have to go through a fairly complicated decision chart and analysis about whether or not there is a problem, and that there are enormous burdens put on the economy there. I also want to talk a little bit about risk assessment.

Let me recess the subcommittee, and we will come back after that.

[Recess.]

Mr. MCINTOSH. The subcommittee will come to order.

Thank you for your patience, Mr. Dear and Mr. Woodward.

Let me turn now to a couple of the blowups there. I hope people can see them. I hope you have a copy available. These were part of the draft proposal that was circulated that kind of is and kind of is not being used as the basis today for the agency's work.

What I wanted to ask, as a threshold question, was, how many times would you need to go through that survey in a job site? If I understood you correctly before, there wouldn't be a universal requirement, but people would have a general duty to make sure that they at least had assessed there wasn't a risk. Is that a fair summary?

Mr. DEAR. There is an utterly simple commonsense couple of questions you need to ask: Do you have any workers' compensation claims that are work-related musculoskeletal disorders? Do you have reports from your employees of difficulties as a result of their work? Have you received any information from anybody who has evaluated your workplace that would indicate that you may have a problem?

If the answer to that is no, that's it. It's very commonsense. Every time you ask one of these questions, when the answer is no, you have no obligation. You're out.

Mr. MCINTOSH. So if somebody complains about a backache or says, "I don't think my work site is set up well with my computer. I'm worried about ergonomics," then that would trigger the obligation to go through this review?

Mr. DEAR. You would have to think a little more. Now, to me, a commonsense employer, when a worker is complaining about difficulty, isn't going to go, "This is completely your imagination. Go back to work." They are going to go, "Tell me a little bit more about this." They are going to do this anyway. I mean, it's just a very sensible approach.

If you have problems, then you're going to have some obligation. But if you have no problem—it's very simple. It doesn't take a complicated analysis; it doesn't take an expert. Any sensible person can make the assessment.

Mr. MCINTOSH. Now, let's move to that, whether it takes an expert or not.

The outline here, the decision logic to determine if you have to address the problem, has 10 different steps. And each time there was a loop—or at least several times in there, there was a loop that you had to do, a checklist. I was looking through the checklist earlier. It was pretty extensive. You have different scoring points for various things, like: Do you have 2 pounds of pressure when you pinch an item? Do you have repetitive motions of different types?

That, to me, especially if people have a formal requirement in the rulemaking for the type of checklist they need to go through, sets up an enormous burden, with the potential, quite frankly, that somebody who is in a disagreement with their employer could use that as a mechanism either for retribution or to gain leverage in whatever the other disagreement is about, by simply saying, "I've got an ergonomics problem, and I'm going to report you to OSHA if you don't demonstrate to me that you have addressed this and gone through the decision logic and the test."

The potential there for a huge amount of burden and, ultimately, employers looking for a solution, finding experts to come in and certify their decisions, so they are not subject to liability, is something that I think needs to be taken into account in all of this approach.

The question I had was, do we really need to ask them to go through that many times on the checklist? Every time there was kind of a quick fix, and then there was a job improvement, and a design control of new and changed jobs, each time, it looked like they were then starting over again with this checklist.

Mr. DEAR. You're starting at step two, and I'm talking about step one. Step one is just a simple—do you have any of these signal risk factors? No? That's it. Finished. You're done. Yes? Then you look at a checklist. So millions of employers aren't going to get—they are going to look at that first part and go, "I don't have any obligation. Finished."

If you have the problems, if you have the signal risk factors, then you do the checklist. If your checklist score is below what we suggested in the draft in March, below five, you're done. So you get a worker complaint, and it's frivolous, it doesn't relate to any real hazard; no obligation.

I might point out that workers, if that's the situation you described, can complain anyway now. I mean, you know, there's no change.

Mr. McINTOSH. Right. But there's not an OSHA regulation that requires you to go through a checklist if you determine that you might have a risk because the worker complained about backache.

Mr. DEAR. But, Congressman, you know, if a worker complains to an employer—my folks complain to me—I don't tell them, you know, "I don't care how you feel, what you think; I'm ignoring it." I'm going to check into it. You're going to do that anyway.

Mr. McINTOSH. Right. And my point is that step two—we failed on a commonsense standard of requiring this type of extensive checklist. And once you put it into a regulation, it isn't the type that fits every different situation. The employer doesn't get to rely on common sense. There's this standard that they have to go through and this procedure that they have to adopt in order to exonerate themselves from any type of culpability or liability, if there is that type of risk attached, once the rulemaking is in place.

Let me step back to step one, and that is, essentially, you mentioned that there was a risk assessment that was the basis for considering this rulemaking. Has that been a formal study that has been undertaken by the agency, or was it contracted out? Could you give us more details on that risk assessment?

Mr. DEAR. It's what we call the "health effects analysis." It's quite extensive. Some of it relied on contractors. This material was also developed using OSHA's own staff. This part of the material we released in March. There are some 700 citations to the literature that draw a causal connection between the presence of risk factors, particularly multiple risk factors, and the presence of work-related musculoskeletal disorders.

Mr. McINTOSH. Is that risk assessment available to the public?

Mr. DEAR. Yes, we have made it available in discussions. We put it on the Internet. You can get it on the OSHA bulletin board, or you can get it through a Worldwide Web site called "Ergo Web." There have been 4,000 downloads from the DOL bulletin board. And I asked for a count on how many hits there were on Ergo Web, and there were several thousand.

So, yeah, you can get it easily.

Mr. McINTOSH. Have you had any comments about the reliability of the risk assessment?

Mr. DEAR. We have received—yes, particularly in the stakeholder meetings that were conducted in March and April. And I have had opportunity to meet with various labor and business groups in public settings where concerns about risk assessment have been presented to me.

Mr. McINTOSH. In general, is there a consensus among the stakeholders that this is a good risk assessment?

Mr. DEAR. There is not consensus.

Mr. McINTOSH. Are there any plans to do any further studies in order to try to reach consensus?

Mr. DEAR. Yes.

Mr. McINTOSH. And will those be conducted by the agency?

Mr. DEAR. No, they will be conducted by NIOSH, by independent researchers. We have asked some companies whether they would voluntarily implement these and give us some real-world experience. They may not be exactly scientific studies, in the sense of empirical research, but practical, real-world applications of these ap-

proaches. So there is a variety of work going on to enhance our understanding.

Mr. MCINTOSH. Let me ask one other question, then I will defer to some of my colleagues.

You mentioned that in the meatpacking industry there was a problem with repetitive motion. A slightly different issue: Has OSHA looked at the proposed mega reg that your colleagues over at the Department of Agriculture are proposing to determine, one, under ergonomics, whether it fits the standards that you would have proposed, but also, two, some of the issues, in terms of exposure to high temperature settings and some of the issues there in the interagency process, is that something that you have input into?

Mr. DEAR. No, not directly. Now, officials of the American Meat Institute met with me and relayed that concern that there was potentially an interaction between the—I believe it's called—HASIP regulations and OSHA's concerns about ergonomics.

I talked to an Agriculture Department official who said, "If this is an issue about which you have any concern, please feel free to call me, or I will designate a staff person which you can make a comment—" and the Agriculture official said, "We're in the comment stage, and I'll certainly let you know when the comment stage is concluded."

Just yesterday I received a copy of the AMI comments to the Department of Agriculture's HASIP regulations, and they drew my attention to that concern. So we are aware of it.

Mr. MCINTOSH. One of the problems we have been encountering in the corrections process is that there are various regulatory policies and programs in place that give employers conflicting requirements in this area.

When this came to my attention, it sounded like the potential, in both cases—that neither of them are finalized rules at this point, obviously—but the potential was there for that to happen, if both of them went forward. I would urge you to intervene in the interagency process, with OIRA and others, to make sure that doesn't happen and that there is some consistency.

But then that really raises a larger question: What happens when there are activities on the job site which simply can't be corrected, ergonomically, in order to accomplish the task? What do you contemplate employers doing at that point?

I mentioned the Pepperidge Farm cookie example. That may or may not have been able to be corrected. An easy solution to that is to eliminate the job and to have it be mechanized. There are others where you need human input or human activity involved in it, and it may be impossible to eliminate the ergonomics problem. What is the agency's solution to that issue?

Mr. DEAR. I'm going to just respond to your first suggestion, that we be in touch with other agencies. That's a great suggestion. I think there is lots of opportunity for the regulatory agencies to improve by communicating. That's true with Agriculture, EPA, or other agencies. I appreciate that suggestion, and I will followup on that.

The question—I can put it the way I heard it from one employer group I met with, the Coalition on Ergonomics—what do you do

about jobs that can't be fixed? You can't get the risk factor checklist score below five, or whatever number is ultimately suggested, employment that takes what one person characterized as an "industrial athlete" to perform.

Our standard—our proposal—our draft proposal is a performance oriented approach. It tries to embrace the principles of continuous improvement. It says we would expect an employer to keep trying, but if they reached a point at which there could be no further reduction, then their obligation would cease.

One of the things I learned from my own participation in the stakeholder meetings we conducted last year and this spring was that question: How do I know when I'm done, some point of finality? And I think that's one of the areas that needs improvement in the next version of a draft proposal or a proposal we might make to help that out.

But the basic answer is, yeah, there are going to be circumstances in which the job is so demanding that it can't be fixed, and we have to recognize that and be able to communicate to employers that their obligation, their regulatory obligation, has been met.

Now, you took that further. You said, well, what if some jobs are automated, and could this standard have the ironic effect of, in pursuit of protecting workers, decreasing their employment?

The overwhelming experience I've had, in visiting workplaces and talking with managers, talking with workers who have addressed the problem of work-related musculoskeletal disorders, is, when these problems are solved, workers' comp expense goes down; productivity and quality go up. Everybody is pleased with the result. There is a sense of pride and accomplishment of having tackled a tough problem. Ergonomics is about good design of work—

Mr. MCINTOSH. Let me interrupt you for just a second, though. If you've got an assembly line with 30 employees on it, and through efficiency gains they switch that over to a mechanized system and you've got 2 people working at it, there are probably 28 people who aren't happy about that result.

Now, it could be that the marketplace will drive you to that anyway, but with this additional regulatory burden adding to that cost, I don't think you're going to have the 28 people who are no longer employed—or maybe they have been able to find other employment in the plants, maybe not—they are not going to be that happy.

Mr. DEAR. Well, our existing requirement, under current law, is that we assess economic and technical feasibility. That means we really have to know if the requirement is going to impose the necessity to make huge a capital investment to automate an assembly line.

One of the misconceptions about ergonomics is that that's what you have to do: you have to make a huge investment to eliminate the problem, when, in many instances, very simple, practical solutions will do the trick: a table that moves up and down; a simple tool that's shaped a different way than one the worker is using. We have to account, in our analysis of the rule, for economic and technical effects.

Let me say, in terms of the decision of corporations to make capital investments, those are very carefully considered decisions, and

they are based on estimates of return on capital and return on investment. If those decisions tell employers the sensible thing to do is to automate, then that is a decision that will be driven by economic, by market logic, not by a regulatory requirement.

Mr. MCINTOSH. Except that your regulatory requirement is going to add cost to the alternative system. It's going to make the labor factor more expensive. Classic economics tells you, when labor becomes more expensive, people figure out ways to use more capital; in this case, automation.

Mr. DEAR. We don't agree here. I mean, because my observation of the—

Mr. MCINTOSH. Then you don't agree with Adam Smith. I mean, that's what happens when labor becomes more expensive. People find alternatives to use more capital.

Mr. DEAR. Your assumption is that these solutions cost more than the status quo, and our belief is that these solutions reduce the cost of production; they improve its quality and improve the competitiveness of the firm.

Mr. MCINTOSH. So you're telling me that, throughout industry, it's a widespread phenomenon that people are making the decision to have a more expensive process than they would otherwise, that they could actually save a lot of money by adopting this process, but they don't do it, and therefore we need to have a regulation to force them to do that.

Mr. DEAR. That's right, that you have—

Mr. MCINTOSH. I do find that difficult—

Mr. DEAR. No, you have—I've presented 131 cases of employers who have addressed problems of work-related musculoskeletal disorders, using ergonomic principles, to the benefit of the firm. In many of these instances, it was done voluntarily. In some of the instances where we cite successes, it was the result of enforcement by OSHA, a wakeup call, if you will.

The automobile industry and the meatpacking industry are prime examples of a problem which was enormous, in terms of economic and human cost. OSHA stepped in, in enforcement, got the attention of the industry, and a host of cooperative programs developed from that: labor-management programs, programs with us, industry experts, academic experts being brought in, and solutions which have reduced injury and cost.

I met with the CFO of a meatpacking company, and he said, basically, "When I saw this agreement we had entered into, I thought, my goodness, why did we do this?" When he saw the reduction in workers' comp cost and the reduction in the turnover rate that resulted from the implementation of the ergonomics agreement, he said, "This is a moneymaker for the company."

Mr. MCINTOSH. It sounds to me what we need is a massive education program. Maybe we need to enlist the Chamber of Commerce to make that happen, rather than a regulatory approach. I mean, if it's going to be in their own interest, then we need to get the companies to have that information and rely on them to make that decision.

Mr. DEAR. I agree. That's why I have talked about a balanced strategy that does include education and partnership. But some-

times the education is a reminder that there is a legal obligation to provide a safe and healthful workplace.

Mr. MCINTOSH. That's where you go beyond education and have a very strong potential that you, in fact, aren't making a cost-effective decision on that, because you have a different legal regime to deal with. We do disagree on that.

Let me now turn to my colleagues.

Mr. Peterson, do you have any questions?

Mr. PETERSON. Yes, Mr. Chairman. Thank you.

You know, I represent a district that has some meatpacking plants, and I've been through some of those facilities. Clearly, it's a dangerous job, and it's a difficult job, and you're going to have these ergonomic problems, I don't care what you do, if you have people doing these jobs. I think most people recognize that.

I am all for us doing whatever we can to eliminate these injuries and to do sensible things. My concern is that we are going to end up, at the end of this, doing things that are not sensible, which is my—I just, frankly, am tired of answering my telephone and having people tell me about stupid things that regulators are doing that are making things worse rather than better.

I am, frankly, skeptical, at the end of this process, that we're going to end up with something better. We're going to end up doing things to undo some of the good things that have happened, and we're going to end up doing things that are going to actually put people out of work, such as the chairman has been talking about.

And I heard you just say that it's a good idea that you should communicate with these other agencies. I mean, did this just occur to you today? I mean, that makes me even more skeptical, you know, about this whole situation.

So, you know, the point that the chairman has been talking about, in terms of, if this makes economic sense, these folks are going to do it, it seems to me. And I think they have been doing it. In the meatpacking industry, as I understand it, there has been a lot of voluntary effort that has taken place where there has been a substantial reduction in these injuries and there has been substantial improvement. Is that not true?

Mr. DEAR. That's true. But there was also vigorous enforcement by OSHA and multimillion-dollar penalties levied on the industry to bring their attention—

Mr. PETERSON. So nothing happened until that—

Mr. DEAR. After that, OSHA worked with the industry and with the labor organizations representing meatpacking workers, and developed guidelines. These guidelines are implemented by employers, some because they have to, as a regulatory obligation; some voluntarily. Because if they do that, they know they are going to solve a problem, and they don't have to worry about any regulatory compliance activity by OSHA.

So I don't think it started willy nilly. I mean, there was a reason.

Mr. PETERSON. No, I understand that. And there are some companies that had to be forced into this. There were other companies, I think, that were ahead of you, frankly.

Mr. DEAR. Absolutely. Yes.

Mr. PETERSON. And that's my point. What I'm concerned about is that we don't do something here that's going to undermine the

companies that have been doing the right thing, and too often we do that. We end up coming up with a rigid regulation that screws up what we were trying to accomplish, because all of a sudden you've got to follow all these rules, and if you don't follow them exactly, they are going to fine you, you know.

So are you going to—well, as we go through this process, are we going to be able to tailor make this to companies, or are we going to have a rigid, one-size-fits-all kind of a regulation? That's what I'm concerned about. Do you know?

Mr. DEAR. It's going to be performance oriented, which means it's going to be very flexible. Let me illustrate one way we have tried to do that. We put in—

Mr. PETERSON. But I just have to tell you, my experience with your agency up to this point is that it's not flexible. I mean, I can't tell you how many times I've answered my telephone and gotten the answer from your people that they realize what they are doing makes no sense, but they can't do anything else because that's what the guidelines say.

Mr. DEAR. My phone rings too.

Mr. PETERSON. That's what I hear too often.

Mr. DEAR. My phone rings too.

Mr. PETERSON. And I'm tired of it. So, I mean, I hear what you're saying, but I'm skeptical, OK.

Mr. DEAR. Well, you have every reason to be skeptical, based on experience, and I have to demonstrate with results that we're able to implement the new directions we talk about.

Just to give you an example, OSHA was driven by performance measures which said the number of inspections, the number of violations we found per inspection were key indicators of how we did our work. Those are measures of activity, not of result. The performance evaluations for our senior management right down to our front line were built on accomplishing what everybody in OSHA called "the numbers game."

On October 1, 1994, we put in a system of goals that did not talk about those numbers. I think a lot of the stories you heard are based on an organization that oriented all its operations in that direction. I put a stop to it.

I will send the report to the President, 15 initiatives. Your question is going to be: "It sounds good, you know, are you going to be here long enough to make it happen?" But I am committed to that, Congressman.

Just one further thing about the ergonomics issue. We have not issued a proposal. I mean, I can't defend something I haven't done.

Mr. PETERSON. I understand.

Mr. DEAR. One of the reasons is, I go out and I listen to people who have the problem, who are concerned about how we develop this. We're trying to take that into account. My goal is a standard which is sensible to reasonable people, that meets a test. Then we go into the formal hearing process and meet all of the statutory and other obligations.

Safety and health is an issue where, when you solve a problem, it works for the employer, because their costs go down, and it works for the worker.



Mr. PETERSON. That's what I want to accomplish. And, frankly, too often we end up, in this regulatory process, doing things that are contrary to that. That's what I want to stop.

Mr. DEAR. I'm here to fix that.

Mr. PETERSON. This HASIP issue, I mean, here is another regulation that is going to work to the wrong ends, in my opinion, the way they are doing it. We've got a lot of good things going on out there, and if they would have gone ahead on this the way they did, they would have actually stopped the best companies from doing the right things. It's just another one of those things where I think we've got to slow down, and hopefully we will straighten it out.

One of the things, as I understand how this is going to maybe be implemented, what they were talking about was forcing these companies to cool their products to 37 degrees—or 40 degrees, which would cause them to have to cool the workplace to 37 degrees. And if that happened, you know, my being in these turkey plants, I mean, if they are going to have to work in 37-degree temperature, you're going to have a lot more injuries than you have now.

So I think you really need to be paying attention to these other rules. What we're doing on one hand may make your job 10 times harder on the other hand.

Mr. DEAR. I claim no detailed knowledge about the HASIP standard, but, as I indicated, I talked to Michael Taylor at the Department of Agriculture and said that the industry had communicated concern about worker injuries that might help, and that I was available, at his request, at any time, to discuss that. And, as I indicated, he said that they are in the comment period. So we will do that.

Mr. PETERSON. This just happened? This discussion just happened in the last week or two?

Mr. DEAR. Within the past 2 weeks.

Mr. PETERSON. Well, that concerns me, because this mega reg has been out for a long time. The fact that you weren't communicating concerns me, as well.

Mr. DEAR. Well, I called him within days of having the industry let me know they were concerned.

Mr. PETERSON. Well, I guess I just hope that somehow or another we can change the mind frame of our whole regulatory process, because I don't think it's—you know, you can be at the top and you can change these rules and attitudes, in my experience out in the field—I think wetlands is a good example—we've got these wetlands rules that are driving my farmers crazy not because anybody disagrees with what we're trying to do, but the problem, frankly, is the people that implement them.

I have a county where they have implemented the wetlands rules and had zero problem, have solved everything without any problem. The next county over, which is the same type of land, the same situation, you've got the biggest mess you've ever seen, and the difference is, the people that are administering and interpreting the law. And that's the problem that we've got to deal with. I mean, you can do the right things up here, but you've got folks down below that can schmuck up the system, no matter what you put in the law.

It drives people crazy, and it's what is driving this antiregulatory attitude that you're seeing in the Congress and, frankly, I'm part of it. I'm tired of this. I don't think that I was elected to Congress to spend 60 percent of my time trying to straighten out Federal bureaucrats. That's not why I ran for Congress, but that's what I do. That's what my office does all the time.

We need to change this, somehow or another. I think the chairman and I are committed to convening this committee every day, if that is what it takes to shed light on this so it changes. Maybe it's not you that we need in here; maybe it's these people that are working in your offices out there in the field that we need in front of this committee. I don't know.

Anyway, I've gone on long enough.

Mr. DEAR. But you raise a really important point, which is about the management of the agency, and that tends to get obscured when we have these discussions about policy issues. What really counts is what happens in the field, with the front line. You may not have come to Washington to deal with that issue, but I did, because, ultimately, the effectiveness of these programs and the value that taxpayers and employers and workers develop from them is based on that implementation.

I am intensely interested in this question—and I know you're busy, Congressman—but I would be pleased to come visit with you and describe a major effort that we're doing to drive the message that OSHA needs to focus on results to everybody in our organization, and to allow our front-line workers to take out the red tape which inhibits them from doing the job, whether it's enforcing or advising employers about how to get a safer and healthier workplace.

Mr. PETERSON. Well, I would appreciate that. Why don't we do that.

The other thing is, if you would take a look at this HASIP situation and give me some kind of report back in writing about whether there is, in fact, the potential of more workplace injuries because of what they are looking at, I would appreciate that, as well.

Mr. DEAR. I'll do that.

Mr. PETERSON. Thank you.

Thank you, Mr. Chairman.

Mr. MCINTOSH. Thank you, Mr. Peterson.

Mr. Gutknecht, do you have any questions?

Mr. GUTKNECHT. Mr. Chairman, I do, at least a couple of quick ones. I know we've got to vote, so I'll try to be as quick as I can.

Mr. MCINTOSH. We can take a recess.

Mr. GUTKNECHT. Do you want to take a recess and then we will come back?

Mr. MCINTOSH. I didn't know whether there were a lot of questions for the witness or—

Mr. GUTKNECHT. Because I think Mr. Scarborough and Mr. Shadegg may have questions, as well.

Mr. MCINTOSH. Why don't we take a quick recess first, and then come back.

The committee will be in recess.

[Recess.]

Mr. MCINTOSH. The subcommittee hearing is reconvened. Thank you for your patience again.

Mr. Gutknecht, do you want to proceed with questions?

Mr. GUTKNECHT. Thank you, Mr. Chairman.

I first of all want to echo the thoughts of my colleague from Minnesota, Mr. Peterson. How you see the world depends largely on where you sit. Benjamin Franklin said, "I know no lamp by which to see the future than that of the past." The experience we've had in the past, and the experience we've had from many of our small business people in our districts has been that they don't have a particularly high regard for OSHA.

Now, I respect the job that you have, and it's a difficult job. I think all of us do want plant safety and worker safety and all those things, but the problem that we wrestle with on this committee so often is that—at least the perception that some of us have—is that there have been proposed by OSHA and other regulatory bodies, in effect, \$50 solutions to \$5 problems.

Let me, first of all, ask you, under what authority are you pursuing the ergonomics ruling, regulatory rule?

Mr. DEAR. The Occupational Safety and Health Act says the mission of OSHA is to assure, so far as possible, every working man and woman in the Nation safe and healthful working conditions. Section 6(b)(5) of the act prescribes the requirements for OSHA to meet in addressing health risks or risks due to toxic substances. It is on that basis that we are proceeding to address the problem of work-related musculoskeletal disorders.

Mr. GUTKNECHT. So this is principally a health issue, then?

Mr. DEAR. The prescriptions of section 6(b)(5) are somewhat more onerous than those for safety standards, in terms of the amount of scientific and economic evidence we have to present. So it is a higher standard, in terms of what we have to meet to establish a standard.

Mr. GUTKNECHT. One of the concerns that I have—and you acknowledged a couple of points that I feel fairly strongly about—one was that this has been going on for a long time. As a matter of fact, I remember, I think it was 20 years ago, back when I was selling school supplies and equipment, we went to a plant in the north part of Indiana—I think it's just outside of the chairman's district—Peabody Furniture had just come out with an ergonomic school chair.

It's interesting. We talk about OSHA. We subject an awful lot of school kids to these very, very hard plastic chairs for 6 hours a day, that are very rigid. Peabody Furniture was the first company to come out with one that had a lower lumbar back support. I remember talking about ergonomics 20 years ago.

I think that industry has been working on this problem on their own. In fact, you said something else, and I quote directly, you said, if one of your employees complains of a backache, you're going to do something about it anyway. I think that's where we sort of are at this philosophical divide, and that is, how necessary really is it for the Federal Government to enter this area?

I have visited—and I have both some poultry processing plants, and I have some other meat processing plants in my district out in Minnesota—and I can tell you that I toured two of the plants,

and they are extremely interested in ergonomics, because they know what it costs them in terms of lost productivity and workers' compensation costs.

In other words, I think there are plenty of incentives in the market today to get employers to do the right thing. When you say, "You're going to do that anyway," it sort of does raise the question, are we again proposing a \$50 solution to a \$5 problem?

I think industry has recognized and is recognizing more and more the value toward ergonomics. In fact, I was at a software company last Friday, and I think they have 500 employees, and every single one of them, I think, has a computer terminal. They have recognized that correct back support, correct elbow support—or wrist support, if you will—increases productivity, reduces workers' fatigue, makes them more productive, all of these things.

I think the growing concern is, OSHA is now going to come out with this sort of new "gotcha" policy that is going to just fall upon unsuspecting employers. I wonder if you could just comment on that basic expression: "You're going to do it anyway." If employers are going to do most of these things anyway, do we need a new "Department of Ergonomics"?

Mr. DEAR. I spoke of my own reaction because of the values I bring to work, in terms of how people should be treated. I think a lot of people who are in Government and the private sector bring that same sense to work: You've got to treat people like you would like to be treated. You can get pretty far with that as an operating principle.

The degree to which you can use market forces, workers' compensation expense to get good decisions, you should absolutely take advantage of that. I mean, that is the most powerful way we have of encouraging sensible behavior. If that really worked, how can we explain an increase in the incidence of repetitive motion disorders reported by employers to the Bureau of Labor Statistics, from 22,000 in 1981 to 300,000 in 1993? I mean, something is not working.

There are lots of employers like the ones that you mentioned, that take issues of health and safety extremely seriously and recognize the contribution——

Mr. GUTKNECHT. Can I interrupt? How do you respond to that? Have employers gotten 15 times more negligent in the last 20 years?

Mr. DEAR. The information——

Mr. GUTKNECHT. No, no, no, no, not information. What is your answer? I mean, how has that happened?

Mr. DEAR. Not everybody is getting the market signal that they have a problem.

Mr. GUTKNECHT. We have it 50 times worse in the last 20 years?

Mr. DEAR. That's the report of employers. If you look at changes in working conditions, the vast increase in the use of computers, as you mentioned, faster line speeds in certain manufacturing establishments, you see reasons for that. Remember, cumulative trauma is one subset of the larger issue, which includes back injuries and others.

But let me get to this point. Look, there are some employers out there that do a great job; they are way ahead of the Government

in terms of doing this. There are a much larger number of employers in the middle, which is, "Help. If this is really costing me money, get me some help. Show me what I need to do."

And we have a host of initiatives in the reinvention of OSHA that are designed to improve our ability to respond to that or to leverage resources with consultation programs we fund, or insurance companies that provide advice to employers.

There are still a group of employers that, absent enforcement, will do nothing. They will try to externalize the cost of injury and illness. They will let the worker go who is hurt and try to hire another one. And then that cost of medical treatment is borne somewhere else in the system.

So we need a policy of safety and health enforcement, and we need standards that provide guidance as to what is minimally acceptable and provide a process for determining conditions which are below that standard and an ability to enforce.

I am as aware as anybody that an agency that has \$312 million in potentially shrinking budget, and 2,300 people, and 6 million workplaces, and 95 million workers to worry about, that we have to do more than enforce, if we're going to try to improve conditions. But I am also convinced, if we just rely on market incentives, that we will produce more injury and illness than we would if we had a sensible, balanced strategy.

Mr. GUTKNECHT. Well, on that we do agree. I think we need a sensible, balanced strategy. The fear, I think, on this side of these desks up here is that "sensible" and "reasonable" are terms that are rare toward the regulatory process in this country. And I'm certain the calls we get are not the people who are pleased and satisfied with the service they have had. I mean, that's the nature of this business.

Mr. DEAR. If I might, just one other point. One of the things we put in our March proposal was a grandfather clause. It said, if you are already doing something about work-related musculoskeletal disorders, you have an ergonomics program, terrific. If you are getting results, you are done. You have no additional requirement at all from this proposal.

When I met with employers after those meetings, they said, "We looked for the grandfather clause; we didn't see it. We looked at the requirements that you had, and we looked at your statement." There was a disconnect.

I took that as information saying we had the right intention, a grandfather clause: If you have a program and you're getting results, you're in great shape. And the detail necessary to spell that out clearly, reliably in the text, that's one of the benefits of the whole effort we are undergoing of working, thinking, discussing, revising.

That says to employers like the one in your poultry plant, "You're doing great," if they are getting results.

Mr. GUTKNECHT. So I can tell those people they don't have to worry about this.

Mr. DEAR. If they've got a program.

Mr. GUTKNECHT. If they have an ergonomics plan, this will not affect them.

Mr. DEAR. That's right. That's my intention.

Mr. GUTKNECHT. I can quote you on that?

Mr. DEAR. I'm here under oath.

Mr. GUTKNECHT. All right. Let me go to one other question, and I think it is an important one. I see my time has about expired. I hope the chairman will let me finish this.

What differences do you see—or maybe, could you talk a little bit about cost versus benefit analysis? Again, many of us feel that that's very important, because we hear all these examples of \$50 solutions to \$5 problems. Could you talk a little bit about costs/benefits? What do you think are reasonable? We didn't really get an answer, in terms of what about that job that cannot be made ergonomically acceptable.

One of the other problems we have is that some employers, whether they are putting together cookies or processing turkeys, they could export some of these jobs to Mexico and other places. That's not what we want them to do. So can you talk a little bit about cost/benefit analysis? I mean, what would you see to be an acceptable way to measure this?

Mr. DEAR. The law and interpretations of it require OSHA to consider the technical and economic feasibility of its standards. That means, in every standard we develop, even very inexpensive ones, we must look at the cost and the benefits to the economy, and in some cases we look in great detail at specific industrial sectors. We have to take those into consideration. They must be adjusted.

One of the things we have done in developing the ergonomics proposal is a survey of 3,200 firms, asking them lots of questions: Do you have a problem? What have you tried to do? How much did it cost? What were the effects? In fact, the largest single expense we have incurred to date in developing the standard is that survey that provides the basis for the economic evaluation.

When we publish a proposal, the economic effects are discussed in that proposal. They are then subject to review in the public hearing process. One of the things about OSHA hearings that is different from many others is that all of the participants in the proceeding have the opportunity to question each other.

So it's not just the agency sitting up listening; it's the labor folks, the business folks, the experts. And when one side presents, the other side can ask. It's all in the record, and I and the Secretary are required to consider all of that information, taken as a whole, before we make a decision.

So I think it's extremely important to get information about costs and benefits. The process we use does develop that. And specifically on ergonomics, we have paid a lot of attention to that. Depending on how you structure a proposal—and remember, we don't have a specific proposal out there—you show enormous improvement in terms of benefits versus costs. I mean, the benefits swamp the costs.

This is not a case where there is some close call or there is a mandate that requires us to do something which, in fact, imposes more cost than benefit, far from it.

One final note: I don't know how you put a dollar figure on somebody whose hand doesn't work, who can't button a shirt, comb their hair, pick up a child. But there are thousands of workers in this

country who have had surgery and have permanent disabilities that prevent them from that.

So I'm all for considering costs and benefits and being very hard-headed about that, but I don't want to be softheaded about the human element of this. The Pepperidge Farm workers that we have talked about, many of those women had surgery. Now, it may sound like no big deal to put a cookie together and stick it in a cup, but do it for 8 hours. Even the company's own doctors in that case said that the conditions that these women suffered were related to their work.

So we have to remember that we need good science, we need good economics, but there is no way, in a market system, we can put a dollar value on somebody who loses their occupation or has their daily life constricted because of a permanent physical impairment.

Mr. GUTKNECHT. Mr. Chairman, can I followup on that?

Even the example you use, some people are more likely to get back injuries. For example, our family dentist had to have carpal tunnel surgery; not every dentist has to. Perhaps it was what he was doing, and maybe there were ways he could change what he was doing, but, on the other hand, maybe it was just because, I mean, he had a genetic weakness of that type. How do you account for that?

Mr. DEAR. That's not a unique problem with musculoskeletal disorders. We know asbestos exposure has a much higher probability of producing cancer if the worker also smokes. We know that hearing loss is affected by both noise on the job as well as off the job activities. That has not prevented OSHA from establishing standards in both those instances. So it's not a unique problem.

The draft proposal that we circulated in March made the determination of the work-relatedness in the judgment of the employer, not of the subjective report of a worker or somebody else. The employer had to decide there was a connection between that. So we tried to address that practically.

Look, your point is well taken in that there are other things that happen besides work activities that may produce a back sprain or strain and that we need to be aware of that. You can't ignore hundreds of thousands of employer-reported injuries and up to 2.7 million workers' compensation claims and say that none of this problem is work-related.

Mr. GUTKNECHT. Thank you, Mr. Chairman.

Mr. MCINTOSH. Thank you, Mr. Gutknecht.

Let me acknowledge that Mr. Owens is here with us, and he is the ranking member of the Subcommittee on Education and Economic Opportunities that will be dealing with these issues.

Welcome, Mr. Owens. I appreciate your participating in this hearing. Why don't we start, if you have some questions, and we can recess if you don't get to all of them.

Mr. OWENS. I will make it brief, Mr. Chairman, so we will finish. I want to congratulate you on holding these hearings on this very complex subject and thank you for allowing me to participate.

Mr. MCINTOSH. Let me just double check. I assume there is no objection, unanimous consent, that Mr. Owens can participate. I see none.

Mr. OWENS. I serve as the ranking member on the Subcommittee on Workplace Protections of the Economic and Educational Opportunity Committee, and we are, of course, very interested in this subject and have had some hearings on OSHA which were much broader and more general, didn't get as specific on the subject of ergonomics as we would have liked to.

I would like very much to be able to have access to your transcript and be able to use that in the future. I'm sure my committee will also be happy to give the transcripts for our hearings.

In that vein, I also would like you to indulge me a little further and ask unanimous consent to submit for the record a submission made by Mr. Dear, which includes ergonomics success stories and letters and petitions to OSHA requesting ergonomics standards, and also a letter that I have a copy of, from Mr. Dear to you, which explains in great detail, more detail than I have seen before, the process by which they include consultation with the stakeholders.

I think the thoroughness of that process is to be commended, and it would be good if we had a record of how that is accomplished.

Mr. MCINTOSH. Seeing no objection, we will definitely put those in the record.

[The information referred to follows:]



SUBMISSION TO THE RECORD ACCOMPANYING  
STATEMENT OF JOSEPH A. DEAR  
ASSISTANT SECRETARY OF LABOR  
FOR OCCUPATIONAL SAFETY AND HEALTH  
BEFORE THE  
SUBCOMMITTEE ON NATIONAL ECONOMIC GROWTH,  
NATURAL RESOURCES AND REGULATORY AFFAIRS  
COMMITTEE ON GOVERNMENT REFORM AND OVERSIGHT  
U.S. HOUSE OF REPRESENTATIVES  
JULY 12, 1995

- I. ERGONOMICS SUCCESS STORIES
- II. LETTERS AND PETITIONS TO OSHA  
REQUESTING AN ERGONOMICS STANDARD

I. *ERGONOMICS SUCCESS STORIES*

## ERGONOMIC PROTECTION SUCCESS STORIES

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
Atomic Energy Association Plant Crocker (1991)	Cement chemistry section: manual handling.	68 Percent reduction in the total number of days lost due to back pain between the years 1987 and 1990.	Back school.
Eckard et al. (1987)	Automobile manufacturer.	Reduction in carpal tunnel syndrome sur- geries by 50 percent and reduction in long- term upper extremity and back disabilities.	Introduction of redesigned tools, fixtures, and work organization in assembly operations.
Eckenfelder (1992)	All workers at Cheek-nough- Ponds. Work Factors: No spe- cific work factors discussed.	Reduced workers' compensation costs by more than 90 percent in 3 years.	Implemented a ten-step loss preven- tion program including footrests, tilted workstations, adjustable work platforms, and minor tool adjust- ments.
LaBar (1992)	Large manufacturer of household products with 800 workers.	Reduction in back injuries by 50 percent.	Introduction of adjustable work- stations, redesigned hand tools, and improved parts organization and work flow.
Lutz and Hensford (1987)	Large manufacturer of suture and wound closure products with less than 1,000 employees.	Reduction in medical visits from 76 to 28 per month.	Introduction of adjustable work- stations and fixtures, mechanical aids to reduce repetitive motions, and job rotation.
McKenzie et al. (1985)	Large telecommunications equip- ment manufacturer with 6,600 employees.	Incidence rate of repetitive trauma disorders decreased from 2.2 to 0.53 cases per 200,000 work hours. Lost days reduced from 1,081 to 129 in three years.	Introduction of a plant-wide ergonomics training program and red- signed hand tools.
Ortel et al. (1992)	Very small grocery store with 23 employees.	Lower rate of self-reported neck, upper back, and shoulder discomfort.	Introduction of redesigned check- stands, height adjustable keyboards, and training of workers in preferred work practices.
Rigdon (Wall Street Journal 1992)	Large bakery with 630 employees.	Carpal tunnel syndrome cases dropped from 34 to 13 in 4 years and lost days reduced from 731 to 0.	Formation of a union-management cumulative trauma disorder com- mittee. Introduction of workstation changes, tool modifications, and im- proved work practices.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
Westguard and Amrzs (1986, 1985)	Small manufacturer of cable forms with 108 workers.	Increased productivity, decreased employee turnover, musculoskeletal sick leave decreased by ½ over 8 years.	Introduction of adjustable workstations and fixtures, and counter-balanced tools.
SIC Code 2000 Orenburgh (td)	Assembly. Work Factors: Lifting and turning of boxes on a fixed height bench.	Musculoskeletal injury rate went down by 50 percent after the first year.	Adjustable workstations which take the weight off the box.
SIC Code 2011 Murphy (1992)	Large meatpacking plant with 1,257 employees. Pork deboning. Work Factors: Manually deboning of pork shoulders.	Eliminated the stressful and injury-prone task, injury rate has dropped from 30 percent of total work hours to less than 2 percent. CTDs declined from 84 cases in 9 cases, significant gain in productivity, and absenteeism has decreased from 12 percent to 3 percent.	Mechanical deboner was developed.
SIC Code 2011 Murphy (1994)	Meatpacking plant.	Disability costs fell from \$200,000 to \$6,000, lost-time injuries fell from more than 100 to 6, lost-time workdays fell from an annual average of 530 to 64, and total safety-related costs fell from 11 percent of payroll to less than 6 percent.	General Safety and Ergonomics Program was implemented.
SIC Code 2011	Large meatpacking company with 2,310 employees.	Worker productivity increased by 35 percent per employee. Cumulative trauma disorders decreased from 47.8 per 100 workers (1987) to 17.2/100 workers (1990) and 17.7/100 workers (1991). The worker turnover rate decreased from 122 percent (1987) to 63 percent (1990).	Implementation of an ergonomics program including engineering controls, work hardening program, training, and medical management.
SIC Code 2011	Fabrication department workers (beef only) trimming/cutting/pecking.	Excessive reach to retrieve product minimized; shoulder injuries reduced.	Engineering control: change in conveyor belt material preventing slipping of product.
SIC Code 2011	Slaughtering department workers: slaughtering.	Excessive force required to insert tube eliminated. String tying task eliminated. Shoulder injuries reduced at this job.	Engineering control: redesigned weakened rodders.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 2015	Large poultry slaughtering and processing plant with 1,550 employees.	The daily absenteeism rate decreased from >5 percent to <3 percent. The annual employee turnover rate decreased from 165 percent to 60 percent. Recordable injuries and illnesses decreased from 10-14/100 workers (1988-1989) to 7/100 workers (1991). Increased productivity.	Introduction of engineering control measures including tool/handle redesign, work practice controls, administrative controls, and personal protective equipment.
Jerome Foods, Inc. SIC Code 2015 Henderson and Cernohous (1994)	Turkey processing plant.	Decline in reported CTDs and based on the direct accident cost for each employee hour worked, there was a savings of \$0.30 per employee hour for a program investment of \$0.10 per hour.	Implemented an ergonomics program, including engineering and administrative controls.
SIC Code 2015 Amev (1992)	Poultry plant workers.	Cut turnover in half and reduced medical payments 280 percent.	Various controls including adjustable workstations, exercise, and job rotation.
Cargill Inc. SIC Code 2015 Amev (1992)	Large poultry processing company with 580 employees.	Reduced injury and illness rates, health care costs decreased by 280 percent, reduced employee turnover rate (employee turnover is half of what it was 2 years ago), and increased efficiency and quality.	Kill lines are automated, heart, liver, and gizzard harvesting are automated, workstations are adjustable, knives and scissors are angled to prevent wrist exposures, adjustable saw stands, paid rest breaks, and job rotation.
SIC Code 2015	Hand packers and packagers: pack, weigh, and label.	Eliminated stress on wrists, elbows, and shoulders. Reduced complaints due to wrist pain.	Engineering control: workstation redesign to eliminate twisting motion of worker's wrist.
SIC Code 2015	Cutters, trimmers, and deboners: cutup operations.	Increased worker efficiency.	Engineering control: workstation redesign including raising height of miscut table and installing a chute to miscut table.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 2024 Elic (ref)	Ice cream manufacturing plant. Packing operations. Work factors: Repetitive motions, unnatural and constrained positions, high-force exertions, lifting and twisting motions, exposure to low temperatures.	In 2 years, workers' compensation claims went from 4 to none. Absenteeism went from 10 percent to 4 percent; productivity rose by as much as 55 percent.	Engineering controls: Elevating platforms, modification of workstations to provide ample space, elimination of sharp edges with sloping angles or padding.
SIC Code 2043	Large manufacturer of cereal breakfast foods with 770 employees.	Accidents reduced by 5-10 percent and workers' compensation costs reduced by one-third with a cost savings of \$34,000 for ergonomic injuries and illnesses.	Introduction of an ergonomics program including engineering controls, workplace redesign, administrative controls, and personal protective equipment.
SIC Code 2043	Clerical workers (typing or word-processing); clerical.	Reduction in incidence of carpal tunnel syndrome.	Engineering control: arm chairs provided.
SIC Code 2043	Machine or conveyor feeders or offbearers: packaging.	Eliminated lifting of heavy items and incidence of back disorders reduced.	Engineering controls: replaced manual lifting with automated equipment, including pallet jacks, automatic guided vehicles, and robotics. Administrative control: network policy implemented reducing weight of boxes.
SIC Code 2043	Machine or conveyor feeders or offbearers: packaging.	Eliminated lifting of heavy items; incidence of tendinitis in shoulder reduced.	Engineering control: pallet jacks for lifting heavy items.
SIC Code 2092	Small frozen fish processing plant with 100 employees.	The injury severity rate has decreased by 27 percent, workers' compensation costs decreased by 30-40 percent, lost workdays decreased from 304.9/100 workers (1989) to 261.8/100 workers (1991).	Introduction of an ergonomics program including workstation redesign, administrative controls, and a multi-management program.
SIC Code 2092	Cutting and slicing machine operators: linear slicer and hand saw operation.	Manual lifting eliminated and incidence of back disorders reduced.	Engineering controls: workstation and equipment redesign; installed a chute to transport frozen blocks of fish, and actuator operators to lift boxes.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 2092	Hand packers and packagers: labeling.	Incidence of carpal tunnel syndrome reduced.	Engineering control: redesigned process with automated labeling machine.
SIC Code 2092	Hand packers and packagers: packaging.	Manual lifting eliminated; incidence of back disorders reduced.	Engineering control: redesigned workstation.
SIC Code 232	Medium-sized sportswear manufacturer with 256 employees.	The annual illness incidence rate decreased 56 percent from 7,171/100 workers (1991) to 3,137/100 workers (June 1992).	Introduction of an in-plant ergonomics program including engineering controls, work practices, administrative controls, medical management, and training.
SIC Code 2320 Rooney and Moxney (1992)	L.L. Bean workers.	Reduced injuries by 79 percent.	Various controls including adjustable workstations, job design, and automation.
SIC Code 2392 Marcotte (nd)	Mattress Manufacturing: Material handler: move mattresses and springs. Work Factors: Heavy lifting, bending, twisting, reaching overhead work.	Decreased injuries from 9 to 1 in one year, eliminated manual handling, eliminated staging area, labor savings, and increased daily production.	Conveyor addition, fork truck use, reduced stacking heights, and revised handling procedures.
SIC Code 2393 Wick, Moxney, and Watts (nd)	Sewing machine operator: sew and inspect strap. Work Factors: Wrist deviation, pinch grip repetition, and shoulder stress.	Reduced wrist deviation, reduced pinch grip forces, reduced shoulder stress, and 36 percent labor saving.	Redesigned workplace, adjustable stands, and revised work procedures.
SIC Code 2411 Hagen, Karc, and Birger (1993)	Logging workers: cut and lifting logs. Work Factors: Heavy lifting and high energy expenditures.	Reduced energy demands by 12 percent, reduced the mean and peak lumbar compression forces by about 10 percent, and reduced the mean and peak hip movement by 14 percent.	Lengthening of the lifting hooks.
SIC Code 2420 Burdorf and van Duuren (1993)	Plumbing machine operator. Work Factors: Lifting and awkward postures of the back.	Controls decreased work time with heavy load on the back by 5 to 19 percent, the presence of rising platforms and ladders reduced the average time involved in lifting and carrying wooden boards by 10 percent.	Modifications such as raising platforms, roller paths, and ladders.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 2431 Oreburgh (nd)	Inspection and sorting of wood flooring. Work Factor: Frequent and repetitive wrist, shoulder, and arm movement.	The automated system has eliminated new cases of musculoskeletal injuries and work rate has increased by 15 percent.	Automated machinery replaced the tasks that required physical stress.
SIC Code 252	Large office furniture manufacturer with 8,000 employees.	Decreased rate of ergonomic disorders from 21/100 employees (1989) in 19/100 employees (1991-1992). Restricted workdays decreased from 301/100 employees to 221/100 employees. The total cost of ergonomic-related disorders decreased by 21 percent.	Introduction of a plant ergonomics program employing engineering controls, work practice controls, administrative controls, medical management, and education and training. Engineering controls included workstation redesign, lift devices, and adjustable work tables.
SIC Code 2522 LaBar (1991)	Packaging of cabinets.	The number of back injuries have been cut by about 50 percent.	Scissors lift for box containing 2-5 drawer cabinets to keep the work at appropriate height.
SIC Code 2670 Shinnick (1985)	Operations of Speed Queen glue machines.	No injuries reported in two years after modification.	Partial mechanical aid to offloading of cartons.
SIC Code 2780 Ferris (1992)	Book binding operator. Work Factors: Lift, twist, and position paper into cutters (many times per day) and loading and unloading pockets, binders, stitchers, and off-line nailers.	Back injury medical costs fell from \$67,738 to \$6,033, indemnity costs fell from \$35,102 to \$5,117, lost workdays fell from 413 to 112, and production volume increased from 338 million books to 384 million books.	Designed a spring loaded table used for loading and unloading pockets, binders, and stitchers.
SIC Code 2789 Oreburgh (nd)	Material handlers. Work Factors: Manual lifting.	There have been no injuries since the lift operations were automated and 20 percent increase in productivity.	Automation of the process.
SIC Code 2820 Ridyard (1990)	Chemical plant general production worker.	Reduced back injuries by 62 percent.	Various investments and purchased hydraulic material handling equipment.



## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Interventions
SIC Code 2830 Ridyard (ed)	Chemical manufacturer. Manual material handling. Work Factors: Lifting and lowering 100-pound bags, rolling and palletizing 450- to 600-pound drums, pushing and pulling hand-trucks with a fully loaded (2,400 pounds) pallet of bags, lifting and lowering motors (45-250 pounds), and lifting/positioning 92-pound dryer-end boards.	All the atresors were eliminated with an automated handling system, severe back injuries results in lost workdays were eliminated (1979-1989), and 62 percent average reduction in the incidence of total over-exertion back injuries.	An automated handling system was purchased including hydraulic pallet turntables, drum dumpers, and electric hand trucks; eliminated production at areas with poor layout or inadequate equipment; installed fully automated materials handling systems; reduced weight of bags, and administrative controls.
SIC Code 2844 Covach (ed)	Cosmetic manufacturing. Eyeshadow assembly line. Work factors: awkward postures, prolonged sitting/standing.	Productivity increased 136 percent.	Engineering controls: workstation redesign, task automation.
Mobile Oil Refinery SIC Code 2911 Bose (1993)	Large oil refinery with 670 employees. Maintenance operations. Work Factors: Lift and transport valves and pumps, use chain hoists to move drums, bend to position valves for opening and closing, remove oil residue using an impact gun (to remove bolts from barrels), heat exposure, and poor lighting.	Workers' compensation cases dropped by 83 percent and injury rates have dropped by 90 percent.	Added platforms that mate valve access caster ergonomically, added extensions to valve stems to eliminate bending to turn valves, installed hoists over work tables to eliminate lifting and bending, purchased adjustable height carts, upgraded lighting, and back-injury training.
SIC Code 2932 Overburgh (ed)	Manual material handling. Work Factors: Lifting and awkward postures.	There has been a general reduction in all injuries and elimination of lost time musculoskeletal injuries and productivity increase of 10 percent to 20 percent.	Part of the tasks were automated.
SIC Code 308 McClathria et al. (1984)	Automotive plastics manufacturing. Work Factors: forceful pressing of clips onto console causing finger/thumb pain.	Reduced tenositis problems. Productivity more than tripled.	Engineering control: replacement of metal clips with plastic clips for easier insertion onto console.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 3089 NIOSH HETA TA 90-096-973 (1981)	Laminated plastic product manufacturers.	Decreased injuries from 26 (1978) to 1 repeat case (1979).	Engineering controls: tool/workstation redesign.
SIC Code 3131 Townes and Inman (nd)	Manual electronics assembly. Work Factors: Repetitive tasks, forceful exertions, constrained postures, use of hand tools, exposure to vibration, general mental and physical stress (due to poor workplace design), workbench heights too high, non-adjustable chairs, and use of pinch grips.	Reduced complaints of soreness in upper extremities by 55 percent, no new cases of cumulative trauma were reported, increased productivity by 10.24 percent, reduced worker boredom and fatigue, and increased job satisfaction.	Job rotation, new assembly line procedures (use of PULL system), and ergonomic line balancing.
SIC Code 3149 Holland (1991)	Assembly of sneakers. Work Factors: Stitching of sneakers requiring repetitive motions.	CTDs dropped by 62 percent, total serious injuries dropped by 63 percent, injuries involving lost-time dropped 67 percent, dollar losses resulting from these injuries decreased by 89.2 percent, the resultant savings were more than 12 times the total cost of implementation of program.	Extensive ergonomic training program.
SIC Code 3129	Medium-sized manufacturer of encapsulated automotive glass products with 400 employees.	Decreased incidence rate of workers' compensation claims from 19/1000 workers (1990) to 4/100 workers (1992), decreased rate of workers' compensation costs from \$141,000/100 workers (1990) to \$20,000/100 workers (1992), decreased rate of lost workday cases from 8.6/100 workers (1990) to 0.2/100 workers (1992), decreased rate of lost workdays from 1.615/100 workers (1990) to 0.9/100 workers (1992). Increased productivity evidenced by consistent production levels with decreased employment figures.	Introduction of ergonomic program and ergonomic control measures including adjustable workstations, job rotation, and anti-fatigue matting. The program also utilizes a medical management program and an employee training program.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 3231 Oresburgh (nd)	Inspector in a car window pane plant. Work Factors: Glare and lifting.	Less eye strains, greater comfort has increased efficiency, and absenteeism has decreased.	Use of reflectors to reduce glare and a stand was developed to reduce the strain from lifting.
SIC Code 3350 Alumina Company of America		Reduction in over-exertion injuries by 40 to 60 percent over a seven-year period.	Engineering and administrative controls, including lift tables, mechanical assists, and rearranging work.
SIC Code 3411 Benson (1987)	Palletizing cartons of can lids. Work Factors: Manually palletizing heavy cartons of can lids, bending, lifting, lowering, and twisting.	Prior to workplace modifications, there were 2 back injuries per year on average, after modifications half of the back injuries were eliminated, and reduced the bending, lowering, and twisting hazards.	A fixed palletizing stand with a turntable top was installed.
SIC Code 3429 Oresburgh (nd)	Package. Work Factors: Pressure applied to foot pedals to dispose materials, repetitive tasks, lifting and twisting of back, and arms in static posture.	There was almost a five-fold decrease, based on days lost, in musculoskeletal injuries (a reduction equivalent to 5 percent of the department's total wage costs), and frequency of twisting during the packaging operation has been reduced by 30 percent.	Redesign packaging area: raised the level at which boxes are lifted, installed semi-automatic sealing machines and adjustable chairs, and elimination of loading pallets; and training.
SIC Code 3446 Put ergonomics in practical use (1988)	Architectural hardware manufacturing. Work Factors: Lifting and carrying of tote boxes.	Completed eliminated manual lifting from the job; the cost of back injury claims dropped from \$88,400 to \$8,700, reduced back injuries by 90 percent, and purchased 141 of these lifts in a 2 year period. Increases productivity of workers.	Use of adjustable lift tables/trans-porters.
SIC Code 3484 Stein, Humei, and Muller (nd)	Operator: gauge rifle built dimensions. Work Factors: Wrist deviation, repetition (100/hour), shoulder stress, and pinch grip.	Cycle time reduced 32 percent, improved production flexibility, increased operator satisfaction, reduced wrist deviation, reduced pinch grips, and minimized shoulder stress.	Parts racks relocated and angled, gauge anchored, power grip handle added, and adjustable chair and footrest.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 3490 Brazon (1987)	Manufacturer of suspended ceiling hardware. Work Factors: Reach over packaging table to conveyor to obtain supply of bars, wrap bar in paper, turn/twist to place bar in carton, and carry cartons to pallet.	Since the department was redesigned, there have been no back injury claims; eliminated the need to twist/reach, and eliminated manual handling and carrying of 60- to 100-pound cartons.	The need to wrap in paper was eliminated by a better carton design; the bars were conveyed directly to the workstation so that packaging could be done without need to reach/twist, and automated palletizing.
SIC Code 3496	Medium-sized automotive cable manufacturer with 392 employees.	Decreased illnesses from 47 (1991) to 17 (1993); decreased workers' compensation claims and costs from 178 claims (1991) to 88 claims (1993) and \$401,000 (1991) to \$62,300 (1993); decreased lost workday cases and number of lost workdays from 48 cases (1991) to 27 cases (1993) and 1,287 days (1991) to 275 days (1993); and decreased rate of employee turnover from 18.9 percent (1991) to 12.9 percent (1993).	Introduction of ergonomics program utilizing engineering controls, work practice training, and medical management.
Cawpiller, Inc. SIC Code 3531 Cawpiller, Inc., Call's first year in training (1992)	Webbers.	Back injury rate went down by 27 percent.	Ergonomic training program implemented, seat height adjustments were installed, and workstation height was adjusted.
SIC Code 3556 Orenburgh (nd)	Meal processing worker. Work Factors: Static posture of the left arm and wrist under force and ulnar deviation to the right hand.	There was an 80 percent reduction in musculoskeletal injuries to the operators' wrists in the first year that workstation and work methods were changed.	Redesign the workstation, better grips were designed for the knife, and changed the way the meat is trimmed.
SIC Code 3559 Orenburgh (nd)	Rubber manufacturing workers. Work Factors: Use of heavy hand tool causing stress to the wrist and hand, leading to carpal tunnel syndrome; and physical force.	There have been no lost time incidents from repetitive trauma since the new tool was introduced, operators experience less fatigue, improved product quality, and reject material has decreased.	A new hand tool was designed (an air gun) which was ergonomically well-designed, a counterbalance reduced the amount of weight supported, and better handles.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 3559 Geigel, Washburn, and Wick (ed)	Sewing machine manufacturer. Operator: filling sewing machine parts. Work Factors: Awkward posture, repetition pinch grip, and wrist bending.	Reduced wrist bending 87 percent right hand, reduced wrist bending 47 percent left hand, eliminated pinch grip, and production rate increased 11 percent.	Tool workstation redesign: Adjust- able chair and footrest, redesign fixture and file handle, and change height of bench and workrest.
IBM SIC Code 357 Kadla (1992)		Since implementing the program, company has seen a 28 percent reduction in shoulder discomfort and a 30 percent reduction in low back discomfort.	Administrative control: exercise program.
SIC Code 3575	Large computer terminal manufac- turer with 1,047 employees.	Decrease in the rate of workers' compensa- tion cases from 3.7/100 workers (1990) to 2.1/100 workers (1992), decrease in work- ers' compensation costs from \$17,554/100 workers (1991) to \$2,550/100 workers (1993).	Introduction of an ergonomics pro- gram. Control measures including process flow redesign, tool redesign, workstation redesign, job rotation, and personal protective equipment.
SIC Code 3621 Oxemburg (ed)	Machine operator. Work Factors: Working above shoulder height and extended wrist movement.	The reduction in musculoskeletal injury incidence was 29 percent and 23 percent rise in production.	Automated the tasks that caused stresses.
SIC Code 3621 Oxemburg (ed)	Electrical components assembly line. Work Factors: Repetitive work, little stimulus, and absence of scope for personal develop- ment.	Employee turnover has been reduced from 39 percent to 0, sickness absence has been reduced from 36 percent to 30 percent, in- creased efficiency, and reduction in operat- ing costs.	Reorganize the work so all workers could do all jobs and work-stations were altered.
SIC Code 3639	Molding or casting machine opera- tions: melting furnace, polishing area, and packaging.	Reduction in the manual effort required to load and unload machine; contributed to substantial reduction in injuries.	Engineering controls: redesign in- cluding automated equipment and spring-loaded tables with rotating tops.
SIC Code 3639	Molding or casting machine opera- tions: die casting and melting fur- nace.	Substantial reduction in injuries.	Engineering control: automated workstation. Administrative control: job rotation.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 3639	Metal forming machine operators: punch press, rubber, stainless steel forming, and power press operations.	Substantial reduction in injuries.	Administrative control: job rotation. Engineering controls: workstation modifications and process redesign.
SIC Code 3639	Machine or conveyor loaders or offloaders: rivet oven unloader, polishing area, and packaging.	Reduced frequent twisting of arms and wrists; substantial reduction in injuries.	Engineering control: automated workstations. Administrative control: job rotation.
SIC Code 3639	Assemblers and fabricators, hand: sub-assembly, mounting flange assembly, cover assembly, close and connect, and placer and clipper.	Substantial reduction in injuries	Work practice control: redesigned process requiring the use of a mallet rather than the hand to tap top of unit in place. Engineering control: "ergonomic" chairs. Administrative control: job rotation.
SIC Code 3639	Assemblers and fabricators, hand: mounting flange assembly and placer and clipper.	Requires less manual effort to operate presses, reduced wrist stress in assembly operators, substantial reduction in injuries.	Engineering control: workstation and process redesign, replacing labor press with hydraulic press, and introducing custom designed tools.
SIC Code 3639	Large manufacturer of garbage disposal with 900 employees.	Decrease in workers' compensation costs of 40 percent since 1986, cost savings of \$316,957 since 1988.	Introduction of an ergonomics program utilizing engineering controls, primarily automation of manual assembly procedures, training, job rotation, conditioning periods, protective equipment, and a medical program.
SIC Code 3641 Carnum and Bossett (ed)	Lamp manufacturing plant. Utility operators: lamp bulb machine loading. Work Factors: Overhead work, repetitive lifting, carry 38-pound boxes.	Eliminated back and upper extremity disorders in the last four years.	Added vacuum hoist, reduced equipment height, and back awareness program for employees.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Caseplay/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 3661 Fisher and Wisk (nd)	Inspector: inspect silicon wafers at microscope workstation. Work Factors: Extended reach and excessive pinch grip extreme wrist deviations.	Eliminated pinch grip work with straight wrist, reduce arm aspiration, and 25 percent productivity improvement.	Vacuum used changed (normally off to on); standup position allowed lateral nerves, and eliminate material handling tasks.
SIC Code 3661 A program of control of repetitive trauma disorders associated with hand tool operations in a telecommunications manufacturing (nd)	Company of 6,600. Production worker. Work Factors: Contact stresses, repetitive exertions, awkward postures, and forceful exertions.	In 1979 CTD cases = 14, in 1980 = 76, in 1981 = 52, and in 1982 = 33. Lost workdays in 1979 = 1,001, in 1980 = 1,447, in 1981 = 195, and in 1982 = 129. Days restricted in 1979 = 4,470, in 1980 = 2,900, in 1981 = 916, and in 1982 = 622.	Training program, workstation and tool redesign, and restricted job management.
SIC Code 3661 Pope (nd)	Telecommunications manufacturing. Work Factors: Repetitive trauma disorders.	Within 1 year of the program there was a decrease in the incidence rate from 1.1 cases per 100,000 person hours and 1,000 lost workdays to 0.26 cases per 100,000 person hours and 129 lost workdays.	Ergonomic training program.
SIC Code 3661 Postural muscle strain as a causal factor in the development of musculoskeletal illnesses (nd)	Production of telephone exchange part. Work Factors: Awkward posture and considerable, continuous muscle strain in the neck and shoulder region.	In percent of possible working time: Short-term sick leave in 1978 = 1.8, in 1982 = 1.2; long-term sick leave in 1978 = 8.8, in 1982 = 8.5; musculoskeletal injury sick leave in 1978 = 5.0, in 1982 = 2.9, and turnover rate in 1978 = 21.8, in 1982 = 1.7.	Workstation redesign (adjustable tables, illumination), ergonomically designed chairs, and tool redesign.
SIC Code 3661 Spilling et al. (nd)	Small telephone plant with 100 employees. Assembly and fabrication operation. Work Factors: Fixed height workstations created excessive muscular load due to the need to adopt awkward positions.	41.5 percent reduction in ergonomic-related lost-work days and 74.7 percent reduction in worker turnover.	Redesign of workstations to give each operator greater flexibility to very working postures.

ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Descriptions	Success Measure	Type of Ergonomics Intervention
SIC Code 3661 Crosch (nd)	Telephone plant. Work factors: fixed workstations, awkward postures.	Sick leave as a result of musculoskeletal injury decreased from 5.3 percent of working time from 1967-1974 to 3.1 percent of working time from 1975-1982, a decrease in labor turnover from 30.1 to 7.6 percent of working time during the same period.	Engineering control: workstation redesign.
SIC Code 3672 Wick (nd)	Assembler: assemble electronic parts. Work Factors: flexion and neck flexion, wrist deviation, and shoulder abduction and flexion.	Reduced head and neck flexion, reduced wrist deviation, and reduced shoulder stress.	Adjustable chair and footrest, tilt circuit breakers, and armrest's.
SIC Code 3691	Assemblers and fabricators, hand: peeling—take-off operation.	Decreased incidence of carpal tunnel syndrome.	Engineering control: workstation redesign eliminating manual preference of this task.
SIC Code 3691	Assemblers and fabricators: painting—take-off operation.	Eliminated lifting and inserting of battery cells into their cases; reduction in back injuries.	Engineering control: workstation redesign and installation of small semi-automatic lifting devices.
SIC Code 3691	Assemblers and fabricators, hand: clamp assembly operation and battery finishing area.	Eliminates need for manual tightening, reduced incidence of carpal tunnel syndrome, and substantial reduction in injuries.	Engineering control: development of a stationary power ratchet wrench for installation of nuts and bolts on battery cables. Administrative control: job rotation.
SIC Code 3691	Large manufacturer of storage batteries with 1,700 employees.	No major workers' compensable claims for back injury since 1989 and an estimated \$150,000/year savings in avoided injury and lost worktime costs.	Introduction of an ergonomics program including medical screening, training, conditioning period, light duty program, job rotation, engineering controls, and protective equipment.
SIC Code 371	Large automotive manufacturer with 4,160 employees.	Over a three year period the injury and illness rate decreased 11 percent, the severity rate decreased 39 percent, the lost-time workday rate decreased 65 percent, and the lost-time case rate decreased 48 percent.	Introduction of ergonomics program including engineering controls, work practice controls, job rotation/job enlargement, medical management, education, and training.



## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 3711	Rover car manufacturer.	Absenteeism reduced from 8.5 to 4 percent over a 4-year period.	Engineering controls: installation of "visions" to maneuver heavy parts and heating cables to assist in bending.
GM, Ford SIC Code 3711 New practices make work safer at GM, Ford (1988)	Auto assembly line. Work Factors: Assembly line job that required work to be done over the head and repetitive motion.	Saved \$100,000 from injuries related to repetitive motions (in 2 years).	Added an articulating arm to an air wrench. Work is now performed at the chest level.
SIC Code 3711 Mandelker (1993)	Track assembly workers.	For the entire factor: The number of cumulative trauma disorder cases fell from 105 to 54, all workers' compensation claims fell from 330 to 193, number of lost workdays fell from 1,402 to 193, and lost-time injuries fell from 80 to 28.	Job rotation, substitute machine riveting for manual riveting, related work height, and use of lifting devices.
Honda of America Manufacturing, Inc. SIC Code 3711 Lalbar (1992)	Auto assembly worker.	The auto factory saw a 50 percent decline in ergonomic-related injuries after the first year the controls were introduced.	Variable height car conveyor belt, articulating arms to move large parts like dashboards into place, and redesign of tools.
SIC Code 3711 Brandon (1992)	Auto assembly line worker. Work Factors: Attaching a hose to a servo.	Lost workdays before implementation of projects were 3,134, which was reduced to 1,335 after completion of the projects.	28 projects were designed to change specific jobs to make them ergonomically less troublesome.
SIC Code 3711 Oxenburgh (nd)	Auto assembly line worker. Work Factors: Forceful exertions.	70 days lost time and over 1,000 days on restricted duties due to injuries was reduced to no lost days and no personnel on restricted duties due to injuries, and increase in productivity because job required 1 instead of 2 workers.	A hoist was replaced by a conveyor belt set at waist height and automated part of the assembly process.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 3711 Moore (1994)	Company of 680 employees. Manual training of flywheels. Work Factors: Manual handling of the assembled flywheel, repeated forceful use of the hammer, and absorption of shock forces.	Incidence rate of all disorders fell from 3.4 incidents per year to 2.4 incidents per year (79 percent decrease), severity rate fell from 69.2 days per year to 12.4 days per year (82 percent decrease), and the number of CTDs decreased by 78 percent.	Replaced manual training with a mechanical training device.
SIC Code 3711 Wheeler (1992)	Automobile assemblers: assembly line workers (auto). Work Factors: Lean over the side of boxes to lift out parts, reach up to work on assembly, lifting heavy loads, and fit electrical harnesses.	75 percent of the workers can work on the cars with no discomfort or pain due to raised height of cars and absenteeism is down from 8.5 percent to 4 percent.	Reorganized the sequence of assembly tasks, delivery of parts by forklifts, heat the electrical harnesses to make them more malleable, and raised the height that the cars are worked on.
3711 Coach (nd)	Automobile assembly plant. Instrument panel selection.	Revisions resulted in direct labor savings of 2 persons per day, approximately \$90,000 yearly; a savings of \$34,000 in reduced medical costs was anticipated.	Engineering controls: Operator-assist handling device to lift panels, rerouting conveyor system to reduce amount of carrying, elimination of workbench and conveyor so wiring could be done on an adjustable line, addition of a rotation system allowing greater accessibility to panel decreasing awkward arm and wrist postures.
3711 Coach (nd)	Automobile assembly plant. Seat assembly operation. Work factors: Operators using at least 40 different wrist postures and excessive force was being used to pull covers over the foam pads, multiple arm and wrist problems were reported.	A savings of one-half a person-day per shift equalling a savings of \$40,000 yearly; reduced medical costs estimated at \$43,000 yearly.	Engineering and Administrative controls: Vacuum fixture developed to evacuate air from foam, reducing pad size by 44 percent; covers were steamed in an attempt to reduce pull force; additional workers assigned to pull covers in place.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Descriptions	Success Measure	Type of Ergonomic Intervention
SIC Code 3714 Quinn, Baughan, and Wick (ed)	Packaging operator: package fuel pressure regulators. Work Factors: Wrist extension and ulnar deviation, repetition, and heavy lifting.	Reduced wrist deviations by 35 percent and eliminated manual lifting.	Pallet lifter and replaced packing with molded trays.
GM, Ford SIC Code 3714 New practices make work safer at GM, Ford (1988)	Auto assembly line worker. Work Factors: Bend over while workers assemble motors and lift engine cylinder head from a conveyor.	Eliminated manual lifting of cylinder heads; eliminated need to bend over to assemble engine; and fewer lumbar, shoulder and neck injuries. Reduced manpower turnover, thus increasing productivity and quality.	Revised a section of conveyor line and replaced manual lifting with robots.
SIC Code 3714	Large motor vehicle parts and accessories manufacturer with 1,370 employees.	The incidence rate of ergonomic disorders decreased by 67 percent from 37/100 workers (1990) to 12/100 workers (1992). The severity of ergonomic disorders decreased by 50 percent from 116 lost-time days/100 workers (1990) to 58/100 workers (1991). The severity rate decreased an additional 50 percent in 1992 to 29 lost-time days/100 workers.	Introduction of an in-plant ergonomics program, engineering controls including hand tool and workstation redesign, and lift devices. Job rotation and other administrative controls, work practice controls, medical management, and training.
SIC Code 372	Large aircraft engine parts manufacturer with 1,370 employees.	Decrease in the number of carpal tunnel syndrome cases from 26 cases in 1988, 11 of which required surgery, to 1 case in 1992 which did not require surgery. Increased productivity and employee morale.	Implementation of ergonomics program including engineering control measures, work practice controls, administrative controls, medical management, education, and training.
SIC Code 3731	Assemblers and fabricators: grinding, welding, and shipfitting.	Eliminated heavy lifting; reduction to back injuries.	Engineering controls: redesigned equipment including lift tables and a hand crank to turn heavy items.
SIC Code 3731	Welders.	Reduction in back injuries.	Engineering control: workstation redesign and purchased new equipment weighing 60 percent less than old equipment.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 3731	Welders, filamcutters, grinders, and potishers, hand: welding, general labor, and grinding.	Reduction in epicondylitis and reduction in carpal tunnel syndrome.	Engineering controls: modifications to tool and handle design including hammer redesign and non-klid tape on the handles of some pneumatic tools.
SIC Code 3731	Welders and shipfitters: grinding, welding, and shipfitting.	Reduction in back injuries.	Engineering control: workstation re-designed to reduce excessive reaching.
SIC Code 3731	Clerical workers (typing or word-processing): keyboard operations.	Reduction in carpal tunnel syndrome and tendinitis of the wrists and hands.	Engineering control: workstations ergonomically designed. Administrative control: periodic breaks.
SIC Code 3731	Large shipbuilding and repair facility with 10,000 employees.	Decreased workers' compensation costs by \$5.2 million, with an actual net return of \$1.4 million of additional benefits from a self-insurance program. Worker production increased in all areas where ergonomic controls implemented (except clerical department due to required breaks and de-emphasis on specified keystrokes).	Engineering controls including equipment redesign, workstation redesign, hand tool redesign, and lifting aids. Work practice controls, personal protective equipment, administrative control, medical management, and training.
SIC Code 3841	Large manufacturer of surgical and medical instruments with 575 employees.	Decrease in the ergonomic injury and illness rate from 5.27/100 workers (1989) to 2.8/100 workers (1993).	Introduction of an ergonomics program utilizing a medical management program, employee training program, job rotation, and engineering controls.
SIC Code 3942 Cumulative Trauma disorder controls, the ergonomic program at Echelon (ref)	Production worker: manufacturing of sutures. Work Factors: Hand-intensive labor, repetitive exertions, awkward postures, and contact stresses.	CTDs have all but been eliminated, prior to program number of CTD problems was 76 each month, now 23 CTD problems per month.	Development of an ergonomics program.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 3761 Tomar et al. (1994)	Printing workers: missile manufacturing plant. Work Factors: Repetitive exertions and awkward postures.	67.5 percent reduction in average annual total liability for back injury costs, 71 percent reduction in the yearly lost time from back injuries, 76 percent reduction in back injury claims, and net savings as a result estimated at \$65,659.	Back injury prevention training classes including anatomy, posture, physical fitness, on-the-job activities, nutrition, and stress management.
Johnson and Johnson, Inc. SIC Code 3842 Longmate and Hayes (1990)	Assembly of skin staplers. Work Factors: Repetitive wrist flexion/ulnar deviation.	There has been a 10-12 percent increase in productivity and new medical problems have greatly diminished.	Job rotation; workstations were provided with adjustable stands; adjustable, ergonomic chairs were introduced; footrests were provided; and welding equipment was modified.
Diversified Products SIC Code 3949	Fitness equipment manufacturer. Request stirrings. Work Factors: Repetitive exertions, awkward postures, forceful exertions, and contact stresses.	Only one case of carpal tunnel syndrome, reduced from 11.	Redesigned clamp to require less force and less movement, installed exercise program, job rotation, provided wrist supports, and adjusted height of stirring stand.
SIC Code 3999 Gensidy, Bafin, and Deiged (ed)	Line pecker: pack and punch bearings. Work Factors: Excessive force, repetition, wrist deviation, and shoulder stresses.	Reduced punch press repetitions by 50 percent, reduced stamping, and reduced shoulder stresses.	Redesign workpiece, dual punch bearings, eliminate hand stamping, and add adjustable table.
SIC Code 4000 McMahon (1991)	Railroad equipment. Work Factors: Bend over to pick up tools.	Reduced low-back injuries and lost work-days to zero, absenteeism declined from 4 percent to 1 percent, and productivity rose by over 67 percent with no change in staff size.	Store tools and materials off the ground between knees and shoulder height; devised winches to lift and handle heavy equipment; and redesigned work tables, dollies and carts to more easily handle train car parts.
SIC Code 4212 Oxenbergh (ed)	Garbage collector. Work Factors: Lifting of garbage bins.	Reduced the injury rate from 11 percent to 4 percent.	Completely automated the system of garbage pick-up.
SIC Code 4789 Oxenbergh (ed)	Welder and grinder operator. Work Factors: Excessive vibration.	Problems with high vibration and noise have been eliminated and cost-effectiveness was the equivalent of 3 percent savings in labor costs.	Redesign of bolt used.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 4719 Overseasburg (nd)	Railway repair workers. Work Factors: Workstations caused workers to work in awkward postures and required excessive manual force.	The cost of injuries has decreased by more than one-third, the severity of injuries decreased, absenteeism due to injury decreased, and productivity increased by 80 percent.	Redesigned work station.
SIC Code 4810 Tomboro (1990)	Telephone operator. Work Factors: Keyboard and monitor were on an L-shaped desk, seat height was not appropriate, and insufficient lumbar support from seats.	Incidence of injury decreased from 49 cases to 28 cases, which results in a net savings of \$50,000 to the company.	Exercise program, seat cushions and lumbar support for chairs, monitor height was raised, and training program implemented.
Sprint SIC Code 4813	Large telephone communications company with 45,000 employees.	Deaf relay centers experienced an 88 percent reduction in repetitive trauma claims from August 1992 to December 1993. The cumulative trauma incident rate decreased from 51.1 incidents per 200,000 hours (3 <sup>rd</sup> quarter 1992) to 6.1 incidents per 200,000 hours (3 <sup>rd</sup> quarter 1993).	Implementation of an ergonomic program in February 1993.
SIC Code 4932 Covach (nd)	Gas/electric utility. Automated mail remittance facility. Work factors: Musculoskeletal stress due to length and height data operator has to reach.	Lost-time due to work-related injuries decreased from 1,008 hours/month before ergonomic changes to 584 hours one year later. Increased productivity and reduced overtime hours. Reduction in overtime resulted in savings of 7,415 hours.	Engineering controls: Workstation design. Administrative controls: Exercise programs initiated, incentive pay plan initiated.
SIC Code 5141 Gentry (1992)	Butcher (grocery store). Work Factors: Poorly designed knife handle led to severe carpal tunnel syndrome.	For the entire grocery store, these and other controls have led to a reduction in CTD claims from 47 in 1990 to 26 in 1991.	Better designed knife handles were purchased and installed adjustable work tables.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 5410	Buggers: check-out.	Worker morale has improved. Complaints have decreased, injuries are thought to have decreased.	Engineering controls: modified existing checkstands and anti-fatigue mats.
SIC Code 5410	Hand packers and packagers: meat processing.	Worker moral has improved, complaints have decreased, and injuries are thought to have decreased.	Engineering control: ergonomic knives.
SIC Code 5812 Oxonburgh (ed)	Restaurant worker. Work Factors: Repetitive movements and lifting.	Decrease in absenteeism rate from 13 percent to 10 percent, reduction in reported injuries by 40 percent, increased productivity by 10 percent, and savings due to productivity gains was equivalent to 3 workers' salary.	Reduced the amount of food served by the workers and heavy porcelain crockery was replaced with plastic.
SIC Code 6021 Osterholz, Karmann, and Hallmann (ed)	Data entry, banks.	Reduced neck tension syndrome from 54 percent to 16 percent and cut hand injuries to a few percent.	Adjust workstations and lighting.
SIC Code 8051	Nurses and nurses' assistants.	Eliminated patient lifting; reduction in back injuries.	Engineering controls: lifting cranes and ergonomically redesigned bath-tubs. Administrative control: patients assigned designated lift level indicating the number of employees required to lift or move patients.
SIC Code 8051	Large skilled nursing care facility with 800 employees.	Decrease in back injuries from 86 incidents (1990/91) to 49 incidents (1991/92). Decrease in injuries resulting in lost time from 44 percent (1990/91) to 25 percent (1991/92) and a reduction in the average days lost/incident from 14.18 (1990/1991) to 9.04 (1991/92).	Engineering controls (lift devices/side), administrative controls, training, work practice controls, and medical program.
SIC Code 805 Codman (1990)	Hospital: Nursing. Work factors: Lifting, awkward work postures, pushing/pulling, reaching, stretching, twisting, repetitive tasks.	Lost-time reduced from over 600 shifts/year to 500 shifts/year in the final year of the project; average lost time due to nurses' back pain was reduced from 17 working days/claim to 11 working days/claim.	Prevention program, including risk identification, assessment/control strategies, education/training, and injury management strategies.

## ERGONOMIC PROTECTION SUCCESS STORIES (continued)

Company Name/ SIC Code/Source	Company/Process Description	Success Measure	Type of Ergonomic Intervention
SIC Code 8062 Brigham and Cullen (1994)	Hospital workers.	Reduced indemnity cases from 5.7 to 2.5 per year and also 94 percent reduction in back injuries at second hospital.	Pneumat Air Lift systems.
SIC Code 8069 Brower, Chevillie, and Hal (ed)	Morgue attendant: moving de- ceased to refrigerator. Work Factors: Heavy lifting, trunk twisting, trunk bending, and extended reach.	Eliminated manual lifting.	Install lifting system.



**II. LETTERS AND PETITIONS TO OSHA  
REQUESTING AN ERGONOMICS STANDARD**

22-945

Desar Mr. Secretary:

I am Ramona Figueroa. My knees are sick due to kind of work I made. Now I walk hardly and I cannot be standing many minutes. I am very depressed due to this problem.

Mr. Secretary, we ask your support for the government to give standards to improve workplaces to prevent these problems. We want better chairs and knowledge about chemical products, for example.

Mr. Reich, we invite you to visit any factory here, to look at problems we have.

Sincerely yours,

Ramona Figueroa  
1018 E. 163th St.  
Bronx, N.Y.

COMM  
DIVISION  
MAY 23 1955

Estimado Sr. Carlos Riera

Yo soy la Señora Rosana Figueroa  
y tengo una impiedad de la rodilla de vicio a mi  
a clase trabajo que así. y yo no puedo caminar  
mucho ni estar parada mucho tiempo. y desde el este  
problema estoy muy deprimida.

Si un gobierno quisiera una manera mejor para los trabajos  
que me acusan, mas este problema. quisiera mejor saber  
cómo.

Si un Riera le excusara para que usted me visitara me  
faltara para que vea el problema que tenemos.

Atte

Rosana Figueroa

1018 E. 163<sup>o</sup>

Diciembre 4.

22-946

Dear Mr. Secretary

This is Olga Bermudez. I have tendonitis in my right hand and shoulder.

I can't work, lay down on that side, dress myself, grip anything. This problem causes me too much pain. I can't sleep well. This pain awakes me at night.

I need help from my children to do housework. I can't help with anything, a jar, open a can, comb my hair, raise my arm, write a letter. The pain that I feel is terrible in spite of treatments doctors had given me.

Help us to prevent these illnesses through standards that are more acceptable for work and for equipment.

At this moment, I have difficulty writing this letter. I have worked for 15 years doing the same work, and now I am disabled.

We hope to get your support and cooperation. We need so much. Sir, I invite you to visit an industrial garment factory to verify by yourself bad conditions of the workplace.

Sincerely yours,

Olga Bermudez  
104-18 42nd Ave. Apt A-9  
Corona, NY 11368

OSHA  
DOCKET OFFICE  
DATE MAR 23 1995

104-18,42705-4PT 49  
 Cerona NY 11361  
 Estimado Secretario: Reciba,

yo soy Olga Bermudez y tengo una tendinitis en mi brazo y hombro derecho.

No puedo trabajar, acostar me da esa falta, me cuesta me fácilmente, sostenerme con mi mano derecha en un bus o bus.

Esto problema me causa mucho dolor para no pueda dormir bien me despierta al dolor varias veces en la noche.

En mis quehaceres de la casa siempre tengo que pedir ayuda a mis hijos.

No puedo sostener algo pesado, abrir un pote, levantarme, me levanto mi brazo, escribir una carta en fin el dolor es terrible a pesar del tratamiento que me han hecho.

Ayúdenos a prevenir estas enfermedades con algunas normas que sean mas aceptables como mejor equipo de trabajo.

En este momento tengo dificultad para escribir esto yo he trabajado por 15 años haciendo el mismo trabajo y ahora me encuentro incapacitada para trabajar.

Esperamos su ayuda y cooperacion ya que la necesitamos mucho.

Seria yo lo invito a Ud a visitar una fabrica de costura para que por sus propios ojos se sienta de las condiciones de trabajo de algunos

22-954

Dear Mr. Secretary:

I am Asuncion Olivieri. I worked for 37 years sewing at a garment factory. In the last years my spine has been affected. This illness has prevented me from continuing to work. Due to the bad working conditions my health has been permanently damaged.

I cannot neither sit nor stand too long. Always my job was piece work, which affected my health very badly. This sickness is impeding me to do my housework and my personal things. I can't do some things by myself.

These illnesses can be prevented. We need your support to get better standards for work and better equipment, like chairs, machines, tools, and sanitation, etc.

Thanks for your attention and we hope for solutions soon to work-related health problems.

Sincerely yours,

Asuncion Olivieri  
850 Knickerbocker Ave.  
Brooklyn, N.Y. 11207

SEARCHED  
SERIALIZED  
INDEXED  
FILED

22-953

Dear Mr. Secretary:

I am Flor Reinoso. I worked many years as sewing machine operator. My problem is both hands are very sick by carpal tunnel syndrome. My both hands were operated and I can not work. Everything falls from my hands. Pain prevents me to hold anything. Pain from my hands is accompanied by pains from my back.

All this has affected life at home because of I cannot pay attention to my children and my husband. Instead they are attending me. The two operations have helped me very little . I am feeling almost the same as before, everything is falling from my hands.

We want your support to prevent these illnesses. We need new and better standards from OSHA to improve work places to all workers.

We will hope you will accept and act on our request.

Thank you for your attention.

Sincerely yours,

Flor Reinoso  
103-18 124 St.  
Richmond Hill, N.Y. 11419

MAR 23 1977

22-950

Dear Mr. Secretary:

I am Marleny Sossa. I have pain in my hands and arms very bad. I have carpal tunnel disease and tendonitis. I have a strong pain and I cannot sleep. At night I feel numbnesses and cramps. I can't hold things in my hands because they fall. I lost strength especially my right hand I feel too much pain and distress. This pain is too much...

I stayed for 15 years on my job. Now, I cannot work. I am disabled.

We want help and prevention to these illnesses and we need better work tools, and adjustable chairs that have back support.

Mr Reich, We hope that you give us your support to our problems, and we invite you the company where I worked, this is Gary Plastics.

Thank you very much for your attention.

Sincerely yours,

Marleny Sossa  
540 Jackson Ave. Apt. 6A  
Bronx, NY 10455



22-948

Dear Mr. Secretary:

I am Joaquina Vargas. I am suffering carpal tunnel syndrome. This illness is produced by certain sewing tasks, especially manual works, that is to say when one or both hands are used.

Now I am feeling very sick. I have this illness since three years ago, that is to say doctors discovered it.

Due to this matter I am feeling very depressed because of I can't do anything with my hands at home. Everything is too difficult. This illness also affects muscles of arms and neck.

Especially when tasks are piece work people put in a great effort, more than any other way (and they are hurt more).

I would like to ask from you, for myself and for other people and work system improvements.

I invite you to visit some factories in New York to verify bad work conditions that are affecting workers in general.

Sincerely Yours,

Joaquina Vargas  
1977 Eastern Parkway  
Brooklyn, N.Y. 11233

MAR 23 1997

22-947

Dear Mr. Secretary:

I'm Aracely Bedoya. I have carpal tunnel disease, it impedes me to make sewing works and house-work. I can't open a door or carryin hold anything. I am feeling very depressed because I worked 19 years in the sewing industry and I have these illness result.

These illnesses are preventable. Please, can you approve new standards prevent them?

I ask your support to improve machines because they hurt very seriously health.

Please, help us. I am feeling very sick and too much bad.

Thank you for support and I am waiting your help. Please.

Sincerely yours,

Aracely Bedoya  
1352 64thSt.  
Brooklyn, NY 11219

OSHA  
DOCKET OFFICER  
DATE MAR 23 1990

U.S. Department of Labor

Occupational Safety and Health Administration  
1999 Broadway, Suite 1690  
Denver, Colorado 80202-5716

22-774



February 2, 1995

MEMORANDUM FOR: JOSEPH DEAR  
Assistant Secretary for OSHA

FROM: - BYRON R. CHADWICK  
Regional Administrator, VIII

SUBJECT: Organized Labor Support

In response to a request from the local President of the AFL-CIO and the national President of OCAW, I met with approximately 22 local union officials in my office from 2:00 pm to 3:00 pm today. The union officials brought with them petitions signed by several hundred workers in the greater Denver area. Although we discussed a number of issues, such as the lack of funding for the Accident Review Board created in 1990 for the chemical/petrochemical industries, workplace violence, and OSHA's complaint procedures, it was clear that the main purpose of their visit was to impress upon OSHA the absolute necessity of promulgating an ergonomic standard as soon as possible. I was asked to personally tell "the folks in Washington" that the first step in this process should include releasing OSHA's current draft of the ergonomic standard. I was told that if we would do this, we could count on labor to support us as we go forward through the long and arduous process of promulgating a final rule.

The meeting was cordial. The union representatives were well prepared and remarkably well informed on the process of writing standards. I think it important to note that, in spite of the cordial atmosphere, these people were determined to see a standard and were fully prepared to hold us to our responsibility under the Act to promulgate and enforce an ergonomic standard.

Attached are 27 pages of petitions.

Attachment

OSHA  
DOCKET OFFICER  
DATE MAR 23 1995

Millions of workers in the United States are suffering from injuries to their hands, arms, neck, shoulders and back. These injuries are caused by: repetitive work, frequent lifting, working in uncomfortable postures, sitting all day in bad chairs, standing on hard floors, and working with poorly designed tools and work stations. These injuries cost workers and the nation billions of dollars annually and they are preventable. Please act now to publish the Ergonomics standard and prevent these injuries.

PRINT  
NAME

PRINT  
ADDRESS

DAVID M. NAVARRO 17050 YATES ST, WESTMINSTER, CO 80030  
CLARENCE W. Buehler 1/2 P.O. Box 516 Pinedale, CO 80471-0516  
Dehuan D. MIELETON 405 West CAUNON Lakewood, CO 80226  
Dennis L. McCoy 8371 W 90th Pl WESTMINSTER CO 80024  
ALLAN C. SCARFELLA 826 W. DAHLIA CT., LOUISVILLE CO 80221  
LARRY D. HANKINS 8442 YARROW ST ARVADA CO 80005  
Clifton W. Haynes 1904 Nadine CT. Lakeland, Colo, 80527  
TONY ANGELO 2397 HOLYOKE DR BOULDER, COLO 80303  
Doug Scapp 5320 Cole Cir. Arvada Co. 80002  
T.R. Elder 10820 Larry Drive Northglenn, Co 80233  
Jimmy Hunt 11367 W 75th AVE Arvada CO 80005  
Paul Esping, 4349 E 127th Way THORNTON COLO 80233  
David Tolson P.O. Box 595 Erie Co 80516  
Dan L. Pinnett 8159 W 95th Drive Westminster Co 80021  
ALBERT Amador 7020 154th Ct Commerce City, Co 80022  
JEFF W. BARTON 6934 BALSAM ST ARVADA, COLO 80004  
John P. Coats P.O. Box 424 Erie Colo 80526  
TWILA L. CAPE 1711 B So. Rooney Rd. Milleden, Co 80401  
Phillip N. Ciclar 13006 E Mexico Ave Arvada CO 80012  
Tim Brown 1013 Quince Hill Road Golden, Co 80401

U.S. ROBERT REICH, Secretary, U.S. Department of LABOR,  
200 Constitution Ave. NW, Washington, DC 20210

22-905  
950002411

Millions of workers in the United States are suffering from injuries to their hands, arms, neck, shoulders, and back. These injuries are caused by: repetitive work, frequent lifting, working in uncomfortable positions, sitting all day in bad chairs, standing on hard floors, and working with poorly designed tools and work stations. These injuries cost workers and the nation billions of dollars annually, and they are preventable. Please act now! Publish the Ergonomics Standard and prevent these injuries.

NAME *Please sign* ADDRESS DOCKET OFFICER DATE **MAR 23 1996**

*James G. ...* 2613 QUAKER CH. RD YORKTOWN NY

*John P. Baker*

*Arnold W. Murray* 15 FAIRWAY MIDDLETOWN, N.Y.

*Non ...* 338 Peekskill Hollow Rd. Putnam Valley NY 10579

*...* 7 WEDGEWOOD ROAD FISHKILL NY 12524

*...* 12 ELI BRIDGES AVE OSS. NY 10562

*Albat ...* 142 Fullerton Av. Waukegan NY 12550

*...* 46 Morsemore Pl. Yonkers NY 10701

*...* 613 CHALLENGER DR YORKTOWN NY 10588

*...* 5 BRANKSIDE DR PEERSKILL N.Y. 10586

*Chris ...* 5 KIDNEY RD ... NY 10552

*Charles Breakham* TOWN PT PEERSKILL NY 10566

*Joseph R. Butyrins* 64 ELK RD HYDEPARK JCT. NY 12533

*...* 233 WESTWATER AVENUE ... NY 10584

*George H. ...* 455 VIOLET RD SPRING VALLEY NY 10977

*...* 705 Lakeway Rd Yorktown Heights NY 10598

*Michael ...* 6 TAMARIC RD ... NY 10950

*...* 4 ... Ave ... NY 10527

*...* 3481 KAMM DRIVE YORKTOWN HEIGHTS NY 10594

*William O'Brien* 234 WATER HILL RD PEERSKILL, N.Y. 10586

*...* 11 Canyon Rd Putnam Vly NY 10579

*Richard ...* 115 WILCHESTER AVE VERPLANK NY, 10596

Return to: CWA District 1 Health & Safety, 80 Pine St., 37th fl. NY, NY 10005

OPEN 125

## An Urgent Message for Robert Reich U.S. Secretary of Labor

*We the undersigned nursing home workers* are committed to providing the best possible care for the nation's nursing home residents. Lifting and caring for our patients without adequate training, staff, and equipment is causing crippling injuries to our backs and shoulders. The rate of injury in nursing homes has doubled in the last ten years, and our work is fast becoming the most dangerous job in America.

We recognize that our injuries not only cause us pain and suffering, but cost family members and taxpayers hundreds of millions of dollars each year. We also recognize that the nursing home industry is one of the fastest growing in the country. Most of all, we recognize that these injuries can be prevented. We therefore ask you to act now to stop the epidemic and to publish an OSHA standard to prevent these crippling injuries in the nation's nursing homes.



Bobbi Phillips  
Signature  
Bobbi Phillips  
Name  
N.C.H.C.C.  
Facility  
304-846-9389  
Phone

Luis Brisuel  
Signature  
Luis Brisuel  
Name  
N.C.H.C.C.  
Facility  
304-740-8097  
Phone

Mary Vance  
Signature  
MARY VANCE  
Name  
N.C.H.C.C.  
Facility  
304 846 4234  
Phone

Keith Meadows  
Signature  
Keith Meadows  
Name  
N.C.H.C.C.  
Facility  
742-3847  
Phone

Lavoura Lusk  
Signature  
Lavoura Lusk  
Name  
N.C.H.C.C.  
Facility  
304-846-2938  
Phone

Emily Dick  
Signature  
Emily Dick  
Name  
N.C.H.C.C.  
Facility  
846-9223  
Phone

Veronica Miller  
Signature  
Veronica Miller  
Name  
N.C.H.C.C.  
Facility  
\_\_\_\_\_  
Phone

Lucecia Krivichy  
Signature  
Lucecia Krivichy  
Name  
N.C.H.C.C.  
Facility  
304-846-9993  
Phone

**U.S. Department of Labor**

Assistant Secretary for  
Occupational Safety and Health  
Washington, D.C. 20210



July 11, 1995

The Honorable David M. McIntosh  
Chairman  
Subcommittee on National Economic Growth,  
Natural Resources and Regulatory Affairs  
Committee on Government Reform and Oversight  
House of Representatives  
Washington, D.C. 20515-6143

Dear Chairman McIntosh:

This is in response to your letter of July 5, 1995, requesting written answers to a number of questions regarding the Occupational Safety and Health Administration's (OSHA) activities in the area of ergonomics.

**The Status of the Ergonomics Rulemaking and Enforcement:**

- 1) *If and to what extent does OSHA believe its ergonomics regulatory activities would be covered by H.R. 450 if enacted as passed by the House of Representatives?*

We understand that it is the Committee's intent that for the purposes of H.R. 450 "imminent threat to health or safety" does not include conditions that may be covered by a proposed ergonomic protection standard. To that extent, H.R. 450 would preclude the promulgation by OSHA of an ergonomics standard during the period of moratorium.

- 2) *If and to what extent does OSHA believe its ergonomics regulatory activities would be covered by the ergonomics restriction in H.R. 1158 if such a bill had become law?*

It appears that under the terms of H.R. 1158 as currently written, for the duration of this fiscal year OSHA would be precluded from publishing a proposed standard to protect workers exposed to ergonomically-related hazards, or non-mandatory guidelines that would assist employers who wish to voluntarily address these hazards in the workplace.

- 3) *If and to what extent has OSHA or an OSHA representative ever expressed publicly during this administration an intent not to comply with any proposed legislative restriction regarding ergonomics?*

No OSHA representative in this Administration has publicly expressed an intent not to comply with any proposed legislative restriction regarding ergonomics.

- 4) *Does OSHA have any current plans to issue any ergonomics rule, standard or guidance?*

OSHA is continuing to work on a variety of measures to address the issue of preventing work-related musculoskeletal disorders. Among these measures is a potential proposed regulation as outlined in the administration's semi-annual regulatory agenda without a specific projected publication date.

- 5) *If OSHA has no current plans to issue any ergonomics rule, standard or guidelines, will OSHA continue to enforce ergonomics principles or any informal ergonomics standard under the general duty clause?*

The agency is not enforcing any "informal ergonomics standard." As with other recognized hazards, OSHA will continue to use the general duty clause to address ergonomically-related hazards in the workplace, as it has done since the late 1970's.

- 6) *Is OSHA continuing to gather information on ergonomics?*  
 7) *If so, is OSHA gathering this information in preparation for, or anticipation of, the issuance of an ergonomics rule, standard or guidelines in the future?*  
 8) *If OSHA is not gathering this information in preparation for, or in anticipation of, the issuance of an ergonomics rule, standard or guidelines, for what purpose is OSHA gathering this information?*

OSHA has gathered a significant body of information regarding ergonomically-related hazards. We continue to review this information, and supplement it with new data as it becomes available. The Agency intends to remain as current as possible with the state of scientific knowledge in this area. OSHA plans to address ergonomics through a comprehensive strategy that includes both regulatory and non-regulatory activities. All of the information we collect and analyze will be used to ensure that our strategy is based on the best available evidence.

- 9) *Who in OSHA is currently assigned responsibility for working on ergonomics principles, guidelines or conditions? Do you plan to keep that team intact? What would the cost to OSHA be to keep an ergonomics team intact?*

There are many people in OSHA who work on ergonomics principles or conditions in some respect. All of our compliance personnel are responsible for ensuring that employers have safe and healthful workplaces, and this would include consideration of ergonomics principles and ergonomic conditions in the workplace. There is also an Office of Ergonomic Support in the Directorate of Technical Support. The ergonomists in this office provide support to both our field personnel and the public with regard to ergonomics issues. In addition, there is an Ergonomics Team,



operating under the auspices of Health Standards, which is assigned to work on the development of a standard as well as preparing the comprehensive strategy described above. The Team will remain intact to address these issues. The cost of the Team remaining intact is difficult to ascertain since Team members are assigned to many different parts of the Agency and simply devote some of their time to the Team's activities. The amount of time that will be required from them will depend on the amount of work that needs to be performed at various stages of the process. Other resources, such as money for consultants to assist the Agency, should be limited at this point. The most significant costs associated with developing a standard are generally associated with collecting and analyzing the data related to costs and benefits. The bulk of this work has already been completed, and thus the expenditures on them have already been made.

While it is not possible to identify the specific team costs separately, OSHA estimates that an additional \$2,887,000 will be required to complete this project. This estimate includes the cost of training and equipment for OSHA compliance officers and the development of outreach materials to assist employers.

**OSHA's Use of Stakeholder Meetings:**

- 1) *Please list any stakeholder meetings OSHA has held since 1980. Regarding ergonomics stakeholder meetings, please include the following information in your answer:*
  - a) *The date and location of each meeting*
  - b) *A list of all parties invited to each meeting*
  - c) *A list of all parties who requested to attend each meeting*
  - d) *A list of all attendees at each meeting, including anyone from OSHA, the Department of Labor and the White House*
  - e) *The factors used to determine which parties were selected and which were rejected to be stakeholders*
  - f) *Who made the final determination of which parties were selected and which were rejected as stakeholders*

The use of "stakeholder" meetings was initiated by OSHA in the current Administration. Attached you will find information regarding the ergonomics stakeholder meetings convened by OSHA since 1993. A separate list of stakeholder meetings relating to other issues is also provided. A response listing all meetings held by OSHA since 1980 will require an extensive search. We would like the opportunity to discuss this request with your staff in order to clarify it, and will provide a response as soon as the information is obtained and can be compiled.

The ergonomics-related meetings took place early in 1994, and in March and April of 1995. The date and location of each meeting, and the list of participants, are included in the attached information. We believe all of the parties invited accepted the invitation to the meetings. The stakeholder meetings were convened to obtain factual input from a wide range of individuals and organizations prior to publishing a proposal, and were not intended to be meetings where a consensus would be sought or reached on any issue.

Your questions imply a somewhat more formal process than was actually used for stakeholder meetings. Representatives from a broad range of industries that might be affected by, and were interested in, a proposed rule participated in the meetings.

In addition, several of the 1994 meetings were scheduled to take place in locations outside of Washington. In each case, a site visit was arranged for OSHA officials to tour a facility with an ergonomics program in the location. I participated in each of these site visits with various members of the Ergonomics Team. Following the plant tour, we participated in a town meeting of individuals from companies and unions that was arranged by someone from the local area. The host for each of these meetings decided who to invite. These discussions gave us the opportunity to speak to people "outside the Beltway", rather than just consulting with trade associations and national union representatives.

In 1995, we scheduled meetings with the same people who attended the 1994 meetings. As noted in the letter we sent to the invitees, the purpose of the meetings was to "gather information and individual feedback." OSHA clearly noted that these information sessions were not a substitute for the public comment and public hearing process that would take place once the proposed rule was published. We also added some additional attendees and subject areas to reflect significant contacts we had during the intervening year. There was no "rejection" process per se. We did not have a system where people requested an invitation and we decided whether or not to allow them to attend. The selection simply focused on those parties known to be interested which represented various significant concerns in the rulemaking process. We also wanted to ensure that the meetings were of a manageable size to allow active participation by all of the attendees, and interaction between the OSHA representatives and the other participants. At least two members of OSHA's Ergonomics Team attended each town meeting and each stakeholder meeting.

- 2) Please provide a transcript of each stakeholder meeting listed above.

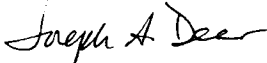
There are no written transcripts of the stakeholder meetings. The Department does have videotapes of some of the meetings which we will provide to the Subcommittee upon your request.

- 3) Does OSHA intend to use the information gathered at these meetings to promulgate an ergonomics rule or standard or to enforce ergonomics principles under the general duty clause?
- 4) If OSHA does not intend to use the information gathered at these meetings to promulgate an ergonomics rule or standard or to enforce ergonomics principles under the general duty clause, for what purpose does OSHA intend to use the information?

The primary purpose of the initial set of stakeholder meetings in 1994 was to obtain information about what should be included or addressed in an ergonomics standard. This information was used by the Team as the draft standard was developed. The subsequent meetings in 1995 were to go back to stakeholders and discuss the approach we developed to get their feedback. The feedback we received will be useful in modifying the proposed rule to address concerns raised or areas that need to be clarified. The information does not relate to general duty clause enforcement regarding ergonomics issues.

We look forward to discussing these issues further with you during the course of the hearing on July 12, 1995.

Sincerely,



Joseph A. Dear  
Assistant Secretary

**OSHA Ergonomics Stakeholder Meetings  
1994 to Present**

Date	Group
February 10, 1994	Healthcare/Dental
February 16, 1994	Office Work Environment
February 17, 1994	Construction
March 4, 1994	Town Meeting - Milwaukee, Wisconsin
March 10, 1994	General Industry
March 25, 1994	Agriculture
March 31, 1994	Town Meeting - St. Paul, Minnesota
April 11, 1994	Town Meeting - Atlanta, Georgia
July 27, 1994	Telecommunications
March 20, 1995	Town Meeting - Milwaukee, Wisconsin
March 20, 1995	Town Meeting - St. Paul, Minnesota
March 21, 1995	Town Meeting - Atlanta, Georgia
March 24, 1995	Town Meeting - Detroit, Michigan
March 27, 1995	Professional Associations
March 29, 1995	Agriculture
March 29, 1995	Healthcare/Dental
March 30, 1995	Office Work Environment
March 31, 1995	Construction and Maritime (also met with OSHA's Maritime Advisory Committee on later date.)
April 3, 1995	General Industry
April 5, 1995	Small Business

**Stakeholder Meeting Invitees/Attendees**

*Note: Although not listed, at least 2 OSHA staff participated in each meeting.*

**Health Care/Dental**

February 10, 1994  
Washington, D.C.

American Hospital Association  
American Health Care Association  
American Nurses Association  
American Federation of State, County, and Municipal Employees  
American Dental Hygiene Association  
American Dental Association  
Home Health Services and Staffing Association  
Service Employees International Union

**Office Work Environment**

February 16, 1994  
Washington, D.C.

'9 to 5'  
Aetna Insurance  
American Federation of State, County and Municipal Employees  
American Newspaper Association  
Center for Office Technology  
Communication Workers of America  
Herman Miller Office Furniture Company  
IBM  
Newspaper Guild

**Construction**

February 17, 1994  
Washington, D.C.

AFL-CIO  
Associated General Contractors of America  
Associated Builders and Contractors  
Bechtel Construction  
Center for Protection of Workers' Rights  
International Brotherhood of Painters and Allied Trades  
International Union of Operating Engineers  
International Brotherhood of Electrical Workers  
International Association of Bridge, Structural and Ornamental Iron Workers

National Association of Home Builders  
 National Erectors Association  
 National Construction Association  
 Painters and Allied Trades  
 Sheetmetal Workers  
 United Brotherhood of Carpenters and Journeymen

**Town Meeting**  
 March 4, 1994  
 Milwaukee, Wisconsin

Allen Bradley  
 GE Medical Systems  
 Harley-Davidson  
 Midwest Institute of Occupational and Environmental Safety and Health  
 Northwestern Mutual Life Insurance  
 Oshkosh B'Gosh  
 Patrick Cudahy Incorporated  
 PPG  
 Quad Graphics  
 Strauss Brothers Packing Company

**General Industry**  
 March 10, 1994  
 Washington, D.C.

AFL-CIO  
 Amalgamated Clothing and Textile Workers Union  
 American Insurance Association  
 International Brotherhood of Teamsters  
 Liberty Mutual Insurance Company  
 Motor Vehicle Manufacturers Association  
 National Association of Manufacturers  
 National Broiler Council  
 Organizational Resources Counselors  
 United Food and Commercial Workers  
 United Auto Workers

**Agriculture**  
 March 25, 1994  
 Washington, D.C.

American Farm Bureau Federation  
 American Association of Nurserymen  
 California Department of Labor and Industries

California Rural Legal Assistance Foundation  
 Farm Labor Organizing Committee  
 Farmworkers Association of Florida  
 Farmworkers Support  
 Farmworkers Justice Fund  
 George Washington University  
 Migrant Clinicians Network  
 National Council of Agricultural Employers  
 National Migrant Resource Program  
 Teamsters

**Town Meeting**  
 March 31, 1994  
 St. Paul, Minnesota

3M  
 Fingerhut Corporation  
 Honeywell  
 IBM  
 IDS Financial Services

**Town Meeting**  
 April 11, 1994  
 Atlanta, Georgia

D.L. Lee and Sons  
 General Motors  
 Georgia Tech University  
 Goldkist, Inc.  
 Holder Construction  
 Russell Corporation  
 Seaboard Farms of Athens  
 Shaw Industries

**Telecommunications**  
 July 27, 1994  
 Washington, D.C.

Ameritech  
 AT&T  
 Bell Atlantic  
 MCI Telecommunications  
 Sprint Corporation  
 U.S. West

**Town Meeting**  
March 20, 1995  
Milwaukee, Wisconsin

Allen Bradley  
Delphi Systems  
Ford Motor Company  
GE Medical Systems  
Gigante & Associates  
Harley-Davidson  
Health Care Consultants  
Imperial Eastman  
Medical College of Wisconsin  
MRA  
Northwestern Mutual Life Insurance  
Oshkosh B'Gosh  
Patrick Cudahy, Incorporated  
PPG  
Quad Graphics  
Strauss Brothers Packing Company  
Work Injury Care Center

**Town Meeting**  
March 20, 1995  
St. Paul, Minnesota

3M  
American Express  
Fingerhut Corporation  
Honeywell  
IBM  
Jacobs Consulting

**Town Meeting**  
March 21, 1995  
Atlanta, Georgia

D.L. Lee and Sons  
Georgia Tech University  
Goldkist  
Russell Corporation  
Seaboard Farms of Athens  
Shaw Industries  
Tyson Foods



**Town Meeting**  
March 24, 1995  
Detroit, Michigan

American Axle  
APT Industries  
Armour, Swift & Eckridge  
Auto Alliance  
Chrysler Motors Corp  
Dept. of Management and Budget  
Frigidare  
Hayes Wheels International  
Health Central  
Human Solutions  
HumanTech  
Industrial Strainers  
Kelsey-Hayes  
Knap & Vogt Manufacturing  
Michigan Industrial Hygiene Society  
Michigan Dept. of Public Health  
Safety Services  
UAW-Ford STC  
UAW-GM Health and Safety  
Woodbridge-Whitmore

**Professional Associations**  
March 27, 1995  
Washington, D.C.

American Physical Therapy Association  
American Industrial Hygiene Association  
American College of Occupational and Environmental Medicine  
American Association of Occupational Health Nurses  
American Society of Hand Therapist  
American Occupational Therapist Association  
American Society of Safety Engineers  
Human Factors and Ergonomics Society  
Institute of Industrial Engineers  
Massachusetts COSH  
National Safety Council  
New York State Department of Health  
University of Massachusetts-Lowell

**Agriculture**  
March 29, 1995  
Washington, D.C.

American Farm Bureau Federation  
American Association of Nurserymen  
California Rural Legal Assistance Foundation  
Farmworkers Justice Fund  
George Washington University  
National Migrant Resource Program  
National Cotton Council  
National Council of Agriculture Employers  
Society of American Florists

**Health Care/Dental**  
March 29, 1995  
Washington, D.C.

American Nurses Association  
American Federation of State County and Municipal Employees  
American Medical Association  
American Dental Association  
American Hospital Association  
American Health Care Association  
American Dental Hygiene Association  
Home Health Services and Staffing Association  
Service Employees International Union

**Office Work Environment**  
March 30, 1995  
Washington, D.C.

'9 to 5'  
Aetna Insurance  
AFL-CIO  
Center for Office Technology  
Communication Workers of America  
Herman Miller  
IBM  
Newspaper Association of America  
The Newspaper Guild

**Construction and Maritime Stakeholder**

**March 31, 1995  
Washington, D.C.**

**AFL-CIO**

**Associated Builders and Contractors**

**Associated General Contractors**

**Atlantic Marine, Inc**

**Bechtel Corporation**

**Carpenter's Health and Safety Fund**

**Center to Protect Workers' Rights**

**Laborers Health and Safety Fund**

**National Maritime Safety Assoc.**

**National Constructors Association**

**National Erectors Association**

**National Association of Home Builders**

**Operating Engineers**

**Sheetmetal and Air Conditioning Contractors Association of North America**

**United Union of Roofers and Waterproofers**

**Winchester Homes**

**General Industry**

April 3, 1995  
Washington, D.C.

AAMA  
Amalgamated Clothing and Textile Workers Union  
AFL-CIO  
AISG  
American Insurance Association  
American Meat Institute  
Liberty Mutual Insurance  
National Paint and Coating Association  
National Broiler Council  
National Association of Manufacturers  
Office of Management and Budget  
Organizational Resources Counselors  
Teamsters  
UAW  
United Food and Commercial Workers

**Small Business**

April 5, 1995  
Washington, D.C.

Atlantis Apparel  
Charleston Forge  
Composites Fabricators  
International Fabricare Institute  
National Small Business United  
National Association of Manufacturers  
National Institute for Occupational Safety and Health  
Office of Management and Budget  
Textile Clothing Tech Corp.  
The Travelers Insurance Company

**Selected Outreach Presentations****AT&T**

Advisory Committee on Construction Safety and Health

AFL-CIO Ergonomics Committee

American College of Occupational and Environmental Medicine

American Dental Association

American Healthcare Association

American Meat Institute

American Medical Association

American Newspaper Association

American Petroleum Institute

American Public Health Association

American Society of Safety Engineers

American Warehouse Association

**AMOCO**

Association of Occupational and Environmental Clinics

Center to Protect Workers' Rights

Chemical Manufacturers Association

Dallas Re-insurance Limited

Department of Defense

Department of Energy

Department of Labor Low Wage Worker Conference

Federal Agency Safety and Health Conference

Federation of American Health Systems

Florida Safety and Health Institute

Ford Motor Company

Foodservice &amp; Packaging Institute

General Motors

Graphics Arts Association

International Conference on Occupational Disorders and Upper Extremities

International Sleep Products Association

Maryland Public Health Association

Mine Safety and Health Administration

NAFTA Albuquerque Conference

National Advisory Committee on Occupational Safety and Health

National Association for Home Care

National Association of Manufacturers/Center for Office Technology

National Association of Manufacturers--Ergonomics Coalition

National Disability Management Association

National Federation of Independent Business

National Grocers Association

National Joint Committee on Health and Safety

National Paint and Coatings Association

National Safety Council

NIOSH

Occupational Health and Environment Conference  
Office of Personnel Management Annual Conference  
Organization Resource Counselors  
Peninsula Business Association  
Purdue  
Shipbuilders Council  
Society for Human Resource Management  
Telecommunications Industry  
Traveler's Insurance  
United Auto Workers  
United Food and Commercial Workers Union  
United Rubber Workers  
Voluntary Protection Programs Participants' Association  
Wal-Mart  
Washington Business Group on Health  
Wisconsin State Occupational Health Nursing Conference  
Workplace Health & Safety Council

## Ergo Stakeholder Meetings/Outreach, page 12

## Site Visits

Plant	Location	Date	Town Meeting Participants
Dupont	Hickory, Tennessee	March 1, 1994	N/A
Aurora Meatpacking	North Aurora, Illinois	March 2, 1994	N/A
Plant A: Manufacturing Company	Milwaukee, Wisconsin	March 4, 1994	Harley-Deviden Patrick Cadaly Incorporated GE Medical Systems Strauss Brothers Pecking Company Northwestern Mutual Life Insurance Quad Graphics Chilton B Godd Allen Bradley Midwest Institute of Occupational and Environmental Health and Safety
3M	St. Paul, Minnesota	March 31, 1994	3M IBM Fingerhut Corporation Honeywell IDS Financial Services
TEEPAK	Atlanta, Georgia	April 11, 1994	TEEPAK General Motors Shaw Industries Goldkist, Inc. Russell Corporation Holder Construction Saubert Farms of Athens D.L. Lee and Sons
Ford	Lake Livonia and Dearborn, Michigan	June 9, 1994	N/A
General Motors	Lake Orion, Michigan	June 10, 1994	N/A
Tyson Foods, Inc.	Orland, Texas	December 16, 1994	N/A
Newport News Shipyards	Newport News, Virginia	June 5, 1995	N/A

Mr. OWENS. I think Mr. Dear has answered part of this question, and I don't want to be redundant, but our chairman of the subcommittee, Mr. Ballenger, made a statement that "Nobody ever died from ergonomics," or why are we so concerned about it?

You started to talk about it a little bit before, the fact that there is no bleeding, you know, when you have a back injury, and blood doesn't drip from people's wrists when they are ruined. We had a lady testify at a hearing in New York where she came in and she could barely testify. She was weeping profusely because her hands were gone. She worked in the garment industry; that's the way she earned a living. Her hands were gone, which meant that she was employment dead, economically dead.

There's a lot of talk about putting workers out of work by having standards. Well, the workers get put out of work by not having standards. They are economically dead. And you started to talk before about the cost of taking care of those people transferred to some other sector. We still have a cost; whereas, we might have avoided it if we had not killed them economically.

Do you care to comment? And the fact that there may not be any dramatic death statistics, on the one hand; on the other hand, the number of people affected by these various illnesses is far greater than the number who would be killed by some kind of machine, being crushed by some kind of machine, the kind of dramatic things that we zero in on.

The pattern, what is the pattern, and what is the cost of these economically dead people?

Mr. DEAR. The human toll is stunning. It's easy to use the numbers—300,000 reported repetitive stress illnesses; 700,000 injuries, if you add back injuries; 2.7 million workers' compensation claims; \$20 billion of workers' comp expense.

It's easy to forget, as we sit in hearing rooms in Washington, DC, and go about our business that most people go to work every day; they work hard; they do the same thing every day. The job is the most important thing they have to maintain their status in the middle class. There is tremendous fear that they may lose those jobs if they report a hazard, if they say they are disabled, if they file a workers' compensation claim. Sure, there are a few people who try to take the system for a ride, but the vast majority of workers want to do good work.

Mr. OWENS. So in the absence of any kind of enforcement standard—any standards, first of all, and any way to enforce those standards, we can have a situation where employers just choose to pursue a policy of disposable workers instead of spending the capital necessary to change machines, and so forth.

It may be cheaper for them to just use a policy of disposable workers. We have disposable spoons and disposable glasses, et cetera, so just throw the workers away as you use them and go on to another one. That would be their solution to the problem.

Mr. DEAR. That can happen. If it could, a lot of people work hurt.

Mr. OWENS. As long as they can.

Mr. DEAR. I mean, they are afraid to report. They work hard. They stick with it. They don't get help, and then they require surgery. They end up in the condition you described as being economically dead. They have no physical ability to work and get paid.



It's easy to say, "Oh, gee," you know, "it's a sports injury on the weekend," or "everybody's got a bad back." Well, you know, most of the people in this room know what back pain is like, and you know when it hurts. And some of those are work-related. And to go to work hurt, which is what people do—now, if you've got a standard, you have a statement of what is minimally acceptable and a guide to how to improve the situation. That's what this is about.

I think there are circumstances where employers, consciously or unconsciously, because they are unaware of the costs, don't do things to prevent injury in the mistaken belief that it makes them more competitive. And the consequence is, workers are treated like debris left over from the production process, and they are swept aside and consigned to a scrap heap.

Mr. OWENS. Just one last question on this matter of people descending from OSHA, inspectors or officials, in great numbers on the businesses of America and harassing them. In a previous hearing that we held, I think the figure was given that, with the number of inspectors you have, a business in America cannot expect to be inspected except once every 85 or 86 years. Is that still true in this hearing?

Mr. DEAR. Yes, sir.

Mr. OWENS. So the number of people—you have fewer and fewer front-line workers out there. They are overworked and underpaid already, and now there is a proposal that you get an OSHA cut of 30 percent, I think is being proposed.

Mr. DEAR. In enforcement.

Mr. OWENS. Yes, in your enforcement. So there will be fewer and fewer to enforce any standards that are ever developed, if you have a chance to actually develop them.

Now, I heard statements about bureaucrats, and we hate to interfere with bureaucrats, and help them do their jobs, you know. I think I've had examples of bureaucrats having an outrageous lack of judgment also, but we interfere with bureaucrats here all the time.

One great interference that I've watched here in the last few weeks is that, in the case of the B-2 bomber, you know, we interfered. The Department of Defense doesn't want the bomber. The Secretary of Defense doesn't want the bomber. The President doesn't want the bomber.

Congress interferes and puts the funding for the bomber back in the budget, \$530 million right away, and over the life of the program, \$31 billion. That's interfering by Congress in the work of bureaucrats who made some sensible decisions about not having a costly thing in the budget.

On the other hand, they want to take out 30 percent of your small agency's budget. That's interfering in another direction, which doesn't make any sense at all.

I thank you for the opportunity, Mr. Chairman, to be able to comment.

Mr. MCINTOSH. My pleasure. Thank you for joining us, Mr. Owens.

Let's take a recess at this point to vote, and then we will be back. I think everybody has had their chance to question you. There were

two members who indicated to me they would like to ask a couple questions, if I could indulge you to wait a few more minutes.

Mr. DEAR. I'll be here.

Mr. MCINTOSH. The committee will stand in recess.

[Recess.]

Mr. MCINTOSH. The committee will come to order.

Thank you, Mr. Dear. I hope somebody got you a sandwich during one of these recesses. I haven't gotten one yet—maybe some cookies—between the two of us.

Let me turn now to Mr. Shadegg who has some questions.

Before I do, let me acknowledge somebody who is very special with him, his son Steven is here, who is 8 years old, and if he has any questions, we will let John ask them for him.

Mr. Shadegg.

Mr. SHADEGG. Actually, Mr. Chairman, I was going to have my son do the questioning, but I won't do that.

Mr. Dear, I notice you have some staff members with you. I spent a great deal of my life in the Arizona Attorney General's Office in a staff capacity. I think it would be nice if you introduced the staff members who are with you. Would you do that for us?

Mr. DEAR. I would be happy to do that. Thank you.

Mr. Woodward is from the Solicitor's Office. Let's see, we have Gary Orr, who is a member of the ergonomics team and is a ergonomist. Sitting next to Gary is Jennifer Silk, who is now the leader of the ergonomics team. She has been a stalwart in the Health Standards directorate of OSHA for many years. Sarah Shorthall is with the Solicitor's Office and has also been a member of the ergonomics team.

Rich Shiesta is with our Congressional Office. He's here to make sure I mind my manners, I guess. Bruce Cohen is with the Solicitor's Office. And Adam Finkel, Dr. Adam Finkel, is director of our Health Standards operation. John Slauheim is with our Policy Office. And Ann Chang is a Presidential management intern serving with OSHA at this time.

There are many others who stand behind these folks back in the Perkins Building, who produce this work we have been discussing today.

Mr. SHADEGG. Great. Thank you very much.

I doubt if anybody doubts that ergonomics is an issue and that, in fact, workplace injuries can occur as a result of repetitive things or things which are done in a way that is not good for our bodies. So I don't think that's the issue here, but I do think there are other issues.

Let me ask you, just briefly, what is your background? I understand you were in the health field or the State regulatory health field in the State of Washington; is that correct?

Mr. DEAR. Prior to my coming to Washington, DC, I was director of the Washington State Department of Labor and Industry. I was responsible for a large workers' compensation operation, the actual insurance operation.

Mr. SHADEGG. So you were involved in workers' compensation.

Mr. DEAR. Yes, sir.

Mr. SHADEGG. Prior to that position, what did you do?

Mr. DEAR. I was deputy head of the agency from 1985 to 1987, then became director. And prior to that I was research director for the Washington State AFL-CIO.

So the experience is politics, public affairs, and public administration, including, when I was with the State, the administration of the Washington State Occupational Safety and Health Plan. Washington is one of the States which elects to operate its own safety and health programs.

Mr. SHADEGG. And before your position with the AFL-CIO, what did you do before that?

Mr. DEAR. I ran a nonprofit organization that was concerned with State tax policy, called "People for Fair Taxes."

Mr. SHADEGG. Well, that's a good cause. And before that?

Mr. DEAR. College student.

Mr. SHADEGG. OK. You said you were involved in the field of workers' comp. I have had an experience much like the chairman's experience, and that is, I have constituents come to me—and actually like the ranking member's experience—I've had many, many, many, many, many people in Arizona come to me, one after another, with a litany of stories about OSHA and concerns about OSHA.

Indeed, your early comments, I think with a rather broad brush, suggested that many of those anecdotal stories we hear simply aren't true. And if that's so, then there are a lot of people coming to me with untrue stories. But be that as it may, I guess my question of you is an incentive one.

I have found, in my life's experience, that people respond to incentives better than they respond to punishment. My son, I seem to do better when I offer him, say, an allowance, or something for doing well, rather than when I threaten him with punishment. He tends to ignore me when I threaten him with punishment.

I had someone come to me the other day and say, "You know, I am more concerned about a single complaint filed with the industrial commission in my State, where my industrial rates could go up, than with an army of kind of second-guessing bureaucrats talking about safety issues." What is your reaction to that? And if we are to—well, what is your response to that, the structure of regulations versus incentives, and economic incentives, in particular?

Mr. DEAR. The question is, how to produce the result which was desired when the Occupational Safety and Health Act was adopted to accomplish the mission: to assure, so far as possible, every working man and woman's safe and healthful conditions of employment.

So questions of enforcement versus consultation, standards versus guidance, are never either/or questions; they are questions of degree and of smart strategy; questions of measuring the effectiveness of organizing the work, in terms of results, and then being prepared to make adjustments based on what those results are.

I came to Washington, DC, and I say, "OK. Let me see the management reports." And things are dusted off from 1983, and I see a bunch of activity measures. I ask to see what the performance evaluations were. I mean, these are the incentives in OSHA. I mean, people do—you're absolutely right—people behave the way the incentives are structured. That's what logical people do.

As I have indicated today, we have changed the performance measurement from how many inspections and how many violations to, what impact is the organization having on reducing safety and health.

Now, with respect to what the private sector is doing, how do they respond, I've had personal experience with companies that were insured with the State of Washington, where we were able to bring to the attention of senior management the cost of injury and illness. Now, they were paying their workers' compensation premiums, but in many cases they were being treated as a fixed cost, not as a variable cost. It was just "something we have to do."

So we would try to communicate to the senior management, not to the safety and health person, but to the owner, to the CEO, and say, "Here's an evaluation of your cost, your direct cost of injury," and, as you indicated from your story, the fact that if one claim is filed, the experience modification factor increases, it has years of additional expense.

When that material is presented, you often see those executives make the one essential, crucial decision, which is, they are going to commit their time, as executives, to the issue of safety and health in their company. And when that happens, you have an internal system.

Mr. SHADEGG. I think you indicated earlier that, with regard to the successes you've had with ergonomics, it has been because they have discovered there was an economic benefit to doing that, or at least those have been the biggest successes. The CFO that you mentioned earlier, who said, "Gee, this is good for our bottom line."

Mr. DEAR. Yes. But he didn't do anything until another part of his company signed an order with OSHA agreeing to implement an ergonomics program, because those costs had never become that apparent, and the opportunities for savings hadn't been quantified in a way that allowed him to exercise that economic—

Mr. SHADEGG. Do you find your job difficult?

Mr. DEAR. It's a great challenge.

Mr. SHADEGG. Somehow I see you as attempting to second-guess every single businessman in America. If I had that job, I would find that immensely difficult.

You said a few minutes ago that, for example, in figuring out how to apply these, you had to look at the economics. I can't imagine how you can look at the economics of my brother's construction company in Tucson, AZ, and understand how best to make those decisions for him.

And yet, as I hear you, and as I look at the mission that maybe the Congress has given you, I think we're asking you to second-guess every economic decision in the American economy, and I, quite frankly, am baffled as to how you could do it without being severely criticized. And I'm, quite frankly, baffled as to how you do it without causing any more chaos to the economy than you already cause.

For example, it seems to me—I have severe problems with morale in employment. Lots of people get depressed, and I wonder if OSHA is looking at—you know, the next step is perhaps we ought to be looking at mental counseling, because we are dealing with oc-

cupation safety and health. Have we begun to look at the issue of health counseling under OSHA? Mental health, I'm talking about.

Mr. DEAR. No. We've worked and will be publishing shortly what we call an action list of priorities for regulation and nonregulatory interventions. It's a systematic effort involving industry, labor, professional organizations, and academia to use our knowledge of what hazards are out there, of risk assessment, to get a priority of what should be addressed.

In the case of ergonomics, a problem which has an estimated economic impact of \$20 billion, that affects hundreds of thousands, if not millions, of workers. I mean, I think we have a problem of sufficient dimension to do it.

Now, you said the job is difficult in the sense—you portrayed it as having to second-guess all the employers. I kind of feel like I'm trying to herd cats. And the question is, how do you structure incentives, whether they are enforcement or guidance or policy, in a way that achieves the result?

The act makes it the responsibility of the employer and the worker to work in a manner which is healthy and safe. It gives to OSHA—

Mr. SHADEGG. But then you get to determine that. You get to determine what is healthy and safe.

Mr. DEAR. It gives to OSHA the authority to develop standards, to enforce them, and to educate and train. We've taken that one step further. We try to recognize models of excellence. We have a program called the "Voluntary Protection Program" that recognizes the best in safety and health, a very difficult program to qualify for.

I almost doubled the participation in the program last year, because I thought, "My goodness, this is something terrific, because this shows what is possible." And models of excellence can help. The companies participating in this program are establishing what they call mentoring programs to help other firms in their geographic areas.

Your State, Arizona, which has a State plan, recently decided at the State level to adopt a similar kind of program.

Mr. SHADEGG. If you are not second-guessing those employers, should we consider making all of OSHA regulation voluntary? I mean, otherwise, we are, in fact, second-guessing them, are you not or are you? It seems to me you are.

Mr. DEAR. I mean, that's a contradiction, a "voluntary standard," a "voluntary requirement." I mean, at some point, you can't have—

Mr. SHADEGG. If the program is best driven by economic incentives, by this gentleman discovering that he could save money, what would have been the reason why you could not have gone in and said, "Look, we have this voluntary standard, and, oh, by the way, the economic side effect of it will be that you will save X thousand dollars"?

Wouldn't we then have a more voluntary arena or a more receptive arena in which you could come forward with your ideas, as opposed to what I sense in Arizona—in Arizona, my constituents are telling me, "OSHA does nothing but second-guess us, and wrongly so, in most instances. What can you do to reform them?"

Now, I understand all those stories are wrong, but that is at least what they are saying.

Mr. DEAR. The stories I've heard, too, often, when you check into them, you know, it's what somebody heard. You get into facts, and there is more than one side to these, and typically they are more complicated. You know, have we done something like cite an employer a couple hundred dollars for not signing an OSHA log, that had no injuries? I mean, that's happened. I'm trying to stamp it out. I don't think it has happened recently, but, you know, that happens.

Mr. SHADEGG. So it does happen?

Mr. DEAR. But regulations are aimed at the margin. I mean, there are firms, as you have indicated and as I have said, that are way ahead of the Government. They decided, for enlightened human resource policy reasons or very hard-headed economic reasons, that serious attention to safety and health is in the interest of the company and its owners and its workers and the communities they operate in.

But there are other firms, regrettably but undeniably, that have an attitude that workers are expendable, that will try to reduce standards, that will drive working conditions and standards down for all firms, who will tempt others to have to take that low road. I mean, what do you say if a firm has 4 out of every 10 workers being injured—4 out of 10—and doesn't do anything? Now, that was a real case.

Mr. MCINTOSH. Would the gentleman yield for 1 second?

Mr. SHADEGG. Certainly.

Mr. MCINTOSH. Mr. Dear, you mentioned earlier something similar to that, which is that there are companies that treat workers like debris, and let me tell you, that statement without any evidence to back it up, is a slap in the face of a lot of employers who work very hard to make sure that they have a safe work site for their employees.

Could you produce a list of employers that you feel treat their employees like debris?

Mr. DEAR. I'll give you one right now.

Mr. MCINTOSH. Just one in the entire country?

Mr. DEAR. Just one right now.

Mr. MCINTOSH. And can you give us more?

Mr. DEAR. Sure. But one: Imperial Food Products in Hamlet, NC, September 3, 1991, a fire broke out in that establishment. The workers tried to escape; the doors were locked.

Mr. MCINTOSH. Had OSHA inspected that plant before that fire?

Mr. DEAR. The State of North Carolina had never inspected that facility. They had almost no capacity to do inspections on a random basis because of the funding level of the program. Twenty-five workers died.

Mr. MCINTOSH. And did U.S. OSHA do anything about this?

Mr. DEAR. We didn't have—we took over the—exercise jurisdiction.

Let me give you a recent one: Omega Plastics Co., operating in New Jersey. They bought equipment from another firm in New England and brought the machinery down. They left off all the machine guards, all of them, just off on the side. There were 10 ampu-

tations of workers in the plant in 13 months. The Police Department called us up and asked us would we go inspect that facility. The case is pending currently, but we assessed them a penalty of \$1.3 million.

Mr. MCINTOSH. After the 13th amputation?

Mr. DEAR. Well, we didn't get in there until the 13th—the 10th—10 in 13 months. But that's a case in May 1995. Two Products Co. also. I mean, these are companies and firms operating, I think, in a way that outrages—that touch a sense of public outrage that all of us can feel.

Mr. MCINTOSH. Do you have a sense that they represent the norm?

Mr. DEAR. No, I do not. I absolutely don't.

Mr. MCINTOSH. Wouldn't it make sense to target our efforts toward those companies rather than have a broad-based approach?

Mr. DEAR. You have to have a standard that allows you to act when you find those circumstances. If there is no standard, and you come and you say, "Well, we don't like it," well, for a governmental agency, there has to be some basis on which an action—you say, "This is intolerable. This is unacceptable. It's illegal, and there is a consequence from it."

Mr. MCINTOSH. And there clearly is a standard that exists in the law.

Mr. DEAR. That's why we have standards.

Mr. MCINTOSH. That's right. But my point is, to say that there are employers who treat their workers like debris and therefore we should have an ergonomics regulation is a fallacious argument, because there are plenty of standards in the law now that prevent those situations from happening. Perhaps, if we targeted our resources toward making sure they didn't happen after the 13th amputation but after the first amputation, then we would actually succeed in providing a safer workplace.

Mr. DEAR. Well, let me be as clear as I possibly can be, a number of employers in this country do an absolutely outstanding job on safety and health. They run some of the finest facilities in the world, in terms of safety and health.

There are a huge proportion of employers who try to do right by their workers in terms of safety and health because they know it's a good way to operate, and they would do that whether or not there was a specific legal obligation or not. But knowing there is a legal obligation, it spurs them to take that responsibility seriously.

There is a tiny minority of employers out there who, indeed, treat their workers as expendable and sweep away injured workers like they are debris from the production process.

Mr. SHADEGG. Reclaiming my time, don't you believe, Mr. Dear, that, in a time of extremely short Government resources, the negligence law of America would allow us to protect that tiny minority, if there is only a tiny minority of companies that are engaged in that conduct?

Mr. DEAR. No, because workers' compensation provides an exclusive remedy and specifically bars suits for negligence.

Mr. SHADEGG. Well, the workers' compensation structure, to the extent that we have—why doesn't that handle the situation?

Mr. DEAR. It's a huge—

Mr. SHADEGG. I mean, if we're looking for ways to save money.

Mr. DEAR. Look, I think there's a lot that can be done using workers' compensation to get employers to do things, and I have some direct experience with Washington State and real successes, and we have tried to operate some cooperative programs with insurers, nationally, to do that. We have great pilot projects under way in New Jersey and Georgia right now that show that.

Very small firms are not experience rated under workers' compensation. There is no economic incentive for them to do that. Health risks take so long, in terms of long latency diseases, that the economic incentive is to find a way to avoid the cost, to externalize it, to hope the worker is not on your payroll when the cancer is contracted. So there really is an absence of economic incentive, in the pure market sense, for long latency health risks.

Mr. SHADEGG. Well, the asbestos industry and their—ultimately, I guess, the bankruptcy of that whole industry would suggest that there was ultimately an economic penalty for ignoring the risk there, wouldn't it?

Mr. DEAR. Yes, and an enormous human cost of cancers which were preventable if there had been some way to compensate the workers and to make the companies accountable.

Mr. SHADEGG. Well, to stopping them from having occurred in the first place.

Mr. DEAR. Right.

Mr. SHADEGG. Let me switch to a different area. My understanding is that you did not choose to use a traditional rulemaking process with regard to ergonomics and that the rules that we have before us were not published in the Federal Register in the normal fashion. Can you explain what process you did go through?

Mr. DEAR. We haven't got that far yet. The agency, in August 1992, published an advance notice of proposed rulemaking. And I hope you will note the month and year.

Mr. SHADEGG. August 1992.

Mr. DEAR. 1992. We received over 300 comments as a result of that advance notice. When I became Assistant Secretary in the fall of 1993, I placed ergonomics on our agenda. It was published as part of the Government's unified regulatory agenda. We had originally intended to publish a proposed rule in September 1994. By the summer of 1994, I recognized that it was going to take more time to produce a quality standard. We passed that deadline. We have not established a new deadline since that point.

It is an unusual rulemaking, in the sense that we have done everything we can to open up the process, to meet with employers, to meet with unions, with medical professionals, professional societies. I have visited workplaces in Michigan, Minnesota, Atlanta, and elsewhere, to actually observe, firsthand, programs, to talk and meet with, you know, real people, not folks here, to listen.

We conducted an extensive set of meetings in March this year, showing proposed regulatory text, the appendices, nonmandatory, and the analysis, a risk assessment, in essence, of that standard. We posted all of that information on the Internet, both through the Department of Labor bulletin board, as well as a Worldwide Web site, and have made it as available as we possibly could.



All of this is preparatory to the publication in the Federal Register of a proposed rule, which would place us under all of the requirements for notice, hearing, comment, revision, and so forth. So we haven't got that far.

Mr. SHADEGG. You have yet to begin that phase of the process?

Mr. DEAR. I have not recommended to the Secretary of Labor a proposal on an ergonomics standard yet. We have presented drafts. We have ideas, but I have not made a decision myself, nor has the Department, to say, "This is the standard we are going forward with."

Mr. SHADEGG. How far away are we from when you would begin that normal rulemaking process, where you would publish a notice and say, "Here's a draft"?

Mr. DEAR. The situation today is that we could publish a proposed rule, if the Office of Management and Budget—if the Secretary of Labor presented a proposal for review to the Office of Management and Budget, and they approved that proposal for publication in the Federal Register.

The situation may change, because the 1995 Recisions bill passed by the Congress, and vetoed by the President, contained a proviso prohibiting OSHA from publishing a proposed rule, a final rule, or any guidelines on ergonomics. If there is a resolution of that recisions bill, my understanding is that that rider would still be in there, and thus we could not publish a rule.

Last night, the Appropriations Subcommittee, in its markup of the fiscal 1996 appropriation for the Department and for OSHA, continued language which would prohibit promulgation of a proposed standard. If that language stands, no, I'm not close at all.

Mr. SHADEGG. Would it be your understanding or your belief that the proponents of that prohibition on such a standard have seen the current proposed rule, in whatever form you have it at this point, the draft?

Mr. DEAR. I don't know. What I do know is that all of the things we think are good about rulemaking, peer review, public hearing and comment, building a record, reviewing it completely, using science to justify a decision, hasn't been done. All I see is Congress saying, "Stop."

Mr. SHADEGG. Why?

Mr. DEAR. Not for any reason that we would use to promulgate a standard, that you have determined, based on the best available evidence, that there is no problem.

Mr. SHADEGG. You don't see it as perhaps being determined by the fact that Congress appears to be reflecting the will of the people to have lost faith in OSHA or in this particular proposed rule?

Mr. DEAR. There has been such exaggeration about the intent, the effect, the possibility of a standard that people have been made fearful of this proposal without any underlying reason. Again, there is no proposal out to say, "This is terrible." And if some of the things that are said about the standard, "There's no science; there's no remedy; there's no problem," were true, we would never make an effective standard. There's no judicial review we could survive.

Mr. SHADEGG. Well, there is a proposal out, in the sense that you have one which you could submit, I believe, and I believe the chairman has a copy; isn't that correct?

Mr. DEAR. We have a draft proposal, but it is not a proposal that I have approved.

Mr. SHADEGG. OK. I didn't hear the earlier discussion about these things.

This is that little binder clip that is used prominently in my office. Is this discussed in that proposed rule, or addressed? I mean, I don't know.

Mr. DEAR. I don't know for certain. I'll be sure to check.

Mr. SHADEGG. OK. Here's my question. I heard you explain earlier—and I thought that was a good point—that we would go through this self-evaluation, an employer would go through a self-evaluation to determine whether or not you came in under the ranking, the five points.

My own question to that is, I don't know an office in America—I came from a law office, but pick any other kind of office in America—where these aren't used and where they aren't squeezed, actually recreationally, for the release of tension. I mean, seriously, often by people.

I don't know, if I were filling out that form, if I would have to inventory my employees and find out if they used these, and if some of them squeeze them to relieve tension, or some of them squeeze them just to put them on files. And I just wondered if that means, at least, that offices would come under the standard.

Mr. DEAR. Offices could come under the standard. In one of the appendices, we do talk about pinch grips, and we say, if you've got somebody doing this 2 to 4 hours a day, you may want to check into it.

Mr. SHADEGG. Psychologically, probably.

Mr. DEAR. Now, if you've got somebody in your law office squeezing these clips 2 hours a day, you know, if I were paying your hourly rates, I would want to know what that person is doing.

Mr. SHADEGG. They are the depressed employees I talked about before, where we need to do mental health counseling, I think.

Mr. DEAR. Yes, well, something that is beyond the scope of ergonomics. Pinching is a force and something that needs to be thought about.

But, look, when I think about the serious problems that workers are experiencing as a result of work-related musculoskeletal disorders, I'm not thinking about people using paper clips or alligator clips. I'm thinking about people in poultry processing or meatpacking plants, where we know, based on the employers' own reported data, based on workers' compensation, that there is a tremendous volume of injuries.

I mean, I think every day, right now, people working, same motion over, and over, and over again; they hurt. And then, some of them hurt so much they require surgery; they lose their jobs. That's the problem we're trying to address, not pinch grips.

Mr. SHADEGG. Sure. No. Fair enough. I appreciate that.

Let me—one other just quick thought. I suffer from a weight problem. And I wonder, has OSHA—I mean, there are some jobs for which, if I have a weight problem, and to the extent that becomes a significant weight problem, it could be dangerous for me to do that job. Does OSHA look at, in any area, the employee's fitness for a particular job and, for example, things that employees

can control, like, for example, their own weight, and whether or not that could affect their ability to perform a job safely?

Mr. DEAR. No, not in the sense that I believe your question is intended. Again, the obligation for the provision for a workplace which is free of recognized hazards that could cause or are likely to cause serious injury is the employer's. Employees are responsible for following good work practices, but the obligation is on the employer. So that's a decision that belongs to the employer.

Mr. SHADEGG. I guess, given that—what is it—30 percent of all Americans, or maybe 40 percent, do, in fact, have a weight problem, when you try to create a standard, do you look at that? How do you factor that in, in creating a standard, a fall standard for a construction site, for example?

Mr. DEAR. Well, in that sense, if you are talking about fall arrest devices, you are talking about devices that are sufficiently robust, from an engineering standpoint, to withstand the weight of the falling person. I mean, there is actually detailed information to that.

But let's take it more broadly.

Mr. SHADEGG. I guess my point is, in your drawing a standard for fall, if I'm 15 percent overweight, we have to at least take care of that, but what if I'm 40 percent overweight, or what if I'm, you know, seriously heavy, 50 percent overweight, or 60 percent overweight? Does the safety standard have to accommodate each of those? Do we have different fall standards for different weight people, or do we have a single standard; do you know?

Mr. DEAR. No, you don't have a—in the case of falls, you have a specification, what the height limit is. Then you say you need some devices, personal protective equipment.

Let me illustrate on a broader basis. There are lots of hazards that cause different effects in people. Some people smoke cigarettes. Not everybody gets cancer, but the evidence is overwhelming at this point that a significant proportion of lung cancer is due to smoking. We don't say, well, this is not a public health issue because only some people will be affected by it.

Some people get cancer if they are exposed to asbestos. They have a much greater risk of getting cancer if they also smoke. That doesn't mean we set a standard for asbestos exposure that only obtains to workers who are smokers and set it lower, nor does it say that we ignore that.

Part of the essence of the debate about how you do risk assessment is how you do that scientific evaluation of where do you put the line; what is above and below. Below the line, some people are still going to be made sick; above the line, some people are going to not have a problem.

Mr. SHADEGG. I guess I would like to stick with my example, because I'm trying to follow it out. Assuming that my brother in his construction business has an employee who is truly obese, let's say 50 percent or 60 percent overweight, and it's beyond the OSHA standards for fall protection. Ultimately, do we rely on my brother's common sense not to put him in a position on a roof, or how does OSHA prepare a standard that protects all Americans?

Mr. DEAR. The weight of the worker is irrelevant in that example. We are going to say to your brother—well, the first thing we are going to ask him is, do you have a safety and health program;

are you managing this? Back to my CEO, have we got the accountability, the internal system in place? If he says yes—

Mr. SHADEGG. And that he should put that employee on a diet or—I'm sorry.

Mr. DEAR. No, that he's looking at serious hazards that his workers are exposed to.

Mr. SHADEGG. He has no option but to look at those hazards. I mean, in the construction business, you've got to look at hazards.

Mr. DEAR. Yes. So we're saying, the first I want to know is, is he trying to manage those risks? Is he actively engaged—because then I'm going to say, I'm going to take a quick look around this construction site, flaw hazards, trenching hazards, electrical hazards, things that kill construction workers, and if it looks like everything is OK, we're out of there. I mean, that's a program we call "focus inspection" in construction, and we are running it nationwide.

If he says "No, I'm too busy."

Mr. SHADEGG. He's not too busy.

Mr. DEAR. OK. Then we will take somebody else. Then we will look at the fall hazard, but we're going to say, are the exposure to falls in excess of the requirements of the standard? It doesn't matter how much a worker weighs.

Mr. SHADEGG. Well, it does, I mean, if the harness is designed to protect somebody at a certain weight and won't protect somebody at a certain other weight. I'm just trying to understand how you create a single standard for a diverse society.

I said before, I understand your job is extremely difficult. I think I would find it nearly impossible. Given the task we've given you, you know, I think you've got to do your best. I just think we've probably given you an impossible task.

Thank you very much.

Mr. DEAR. It's a challenge. I must say, looking at your job, I wonder—the enormous sacrifice and effort you go to serve the people in your role in Congress. I mean, these are all difficult assignments.

Mr. SHADEGG. Thank you.

Mr. MCINTOSH. Thank you, John.

I have one question, then an observation. Mr. Woodward, maybe you want to address this.

When you are conducting, or the staff is conducting the stakeholders meetings, are you giving them advice on how to comply with the negotiated rulemaking requirements, or are those stakeholder meetings not done pursuant to that particular statute?

Mr. WOODWARD. No, those aren't negotiated rulemakings.

Mr. MCINTOSH. They look a lot like them, where you are bringing in outside parties and trying to go over language.

Mr. WOODWARD. I think you may be referring to the Federal Advisory Committee Act, which does establish some requirements if the Government wants to make use of an advisory committee to provide policy kinds of advice. A negotiated rulemaking committee is one kind of advisory committee.

Mr. MCINTOSH. For which there are separate requirements.

Mr. WOODWARD. Right. And there is a separate subset of requirements for that, as well. It applies to groups that have some con-

tinuity, that have some kind of formal structure, and who are asked to provide collective advice to the agency, as opposed to a meeting, an ad hoc kind of a meeting, with individuals. You are not constituting a group and saying, "OK. Give me the group advice," and that group continues over time. Rather, you are just talking to groups of individuals, which is what OSHA has done with the stakeholder meetings.

Mr. MCINTOSH. Now, if they wanted to call some of them back for another meeting, would there be a problem under the negotiated rulemaking?

Mr. WOODWARD. Well, I think you have to look at several factors. There are some definitions in the law and in various regulations and case law, but if you're not asking for group advice, but rather are only trying to gather information, gather facts and get individual opinions rather than a group kind of advice, and if there is no formal structure to it, and if it's just these kinds of ad hoc meetings, then we wouldn't consider that to be at all under the Federal Advisory Committee Act.

It's just an effort to try to find out from people out there—get facts from them. In fact, the current executive order that we are operating under requires us to consult with people who would be affected by, maybe burdened by, or maybe benefited by a regulation before we even propose the regulation.

Mr. SHADEGG. If the gentleman would yield.

Mr. MCINTOSH. Let me just ask one quick question: Are those consultations then put into the record when you move forward with a notice of proposed rulemaking?

Mr. WOODWARD. They can be.

Mr. MCINTOSH. But you don't necessarily have to?

Mr. WOODWARD. What goes into the record will depend on the nature of the rule that is proposed. Of course, matters that OSHA considers relevant to that proposal could be put in the record. Now, I don't think transcripts, though, were made of these meetings. There may be some videotapes of some of them.

Mr. DEAR. Some.

Mr. WOODWARD. Information that OSHA thinks would be relevant and helpful for people in understanding the proposal will be what it will put in the record so that people can comment on it.

Mr. SHADEGG. If the gentleman will yield.

I'm a little confused, because we asked for transcripts and were told there were no transcripts. We were told there were videotapes. Are there, in fact, videotapes?

Mr. DEAR. There are some. In some of the meetings that were conducted outside of Washington the sponsors of the meetings did tape them. For whatever videos we have of those sessions, we have indicated we will make them available to the committee.

Mr. SHADEGG. OK. But you have not created a formal record of what has occurred to date?

Mr. DEAR. No. I know the question was to my attorney. He's probably going to slap my wrists here. But, you know, the idea here is to listen to people. The Advisory Committee Act is to keep insiders from coming in and cutting a sweet deal and not having the public involved. We've done everything we could to make this information available, as I said, the Internet and these meetings.

And, you know, people invite me to come talk about ergonomics, and I show up and do that, and so do a lot of the staff.

We are doing a negotiated rulemaking on another rule, under the Negotiated Rulemaking Act, involving steel erection, so I'm quite familiar with that act. And we haven't concluded that, but I've been extremely pleased with how that negotiated rulemaking is going. Even if the group is unable to produce a consensus, we're still going to have a much better standard because of that intense involvement.

There are other opportunities for less structured, say, informal or consensual rulemaking, where you are bringing people in earlier to get the information, rather than to try to get it exactly right in the proposed rule and then only allow communication in the very structured, formal, requirements of rulemaking under the Occupational Safety and Health Act or the Administrative Procedures Act.

I mean, we have been very careful to observe the requirements of the Advisory Committee Act. We have also involved the Statutory Advisory Committee on Construction Safety and Health, and they are looking at this issue in connection with the construction industry, and we may involve our National Advisory Committee on Safety and Health, which are FACA—

Mr. SHADEGG. Are you using the Advisory Committee Act for this rule or not? Because I thought I heard you say no.

Mr. DEAR. You're under FACA all the time.

Mr. WOODWARD. I think what we're also talking about, there is a separate standing advisory committee for construction, created by a statute. This is sort of separate from—I understood the chairman's question to be about the so-called "stakeholder meetings." But separately from that, there is a permanent group of people, representing business and labor, who form what is called the Construction Advisory Committee, and we have given a copy of the standard to them.

Mr. SHADEGG. I guess my concern is about the stakeholders and about how people get into this particular rule and try to affect it and participate in the process. As I understood what you said before, we're not really in a rule yet.

Mr. MCINTOSH. Let me ask this: Are there people who have requested to be part of the stakeholder process who have not been able to participate?

Mr. DEAR. I'm not personally aware of anybody who requested—that may have happened. I'm not telling you—but nobody who asked me, "Can I come to the meeting," was told by me, "No, you can't."

Mr. MCINTOSH. One of the things I'm concerned about—I think it's great that you listen to people and try to hear as many viewpoints as possible, but we also have to preserve the process and make sure that everybody is given an equal chance to have their voice heard, and also that the public knows which voices are heard and what those voices expressed in the rulemaking process.

The purpose of my question is to put a caution there, as these meetings take place, that there is a sense of fairness in the public on that.

Mr. DEAR. Well, if you take a look at the list of people who participated, I think you will see that we had a rather broad spectrum

of opinion we listened to. I would really like to be able to put a proposal forward and have public hearings and the very structured process. I hope the Congress will permit us to do that.

Mr. MCINTOSH. I have no further questions.

Mr. Peterson.

Mr. PETERSON. Just briefly, I want to clear up one other misconception. I've heard a couple people say that part of what you were doing, you were studying—having truck drivers move the steering wheel and studying if this was going to cause them to be injured or not. Did that ever happen? Are you aware of that?

Mr. DEAR. I'm not aware. I can certainly check to see if—

Mr. PETERSON. I've heard two or three people say that that's part of what you were doing.

Mr. DEAR. Well, I have lots of scientific studies here that we have used. There may be one involved with trucking. Congressman, I'm not personally aware.

Mr. MCINTOSH. Mr. Dear, that was one comment I wanted to make. You mentioned you weren't personally interested that much in paper clips but in poultry factories and other places where you think there are real problems. One of the problems is, we've got this rule—well, it's not a rule yet, but it's a draft proposal that the staff has been doing—that addresses things like that, and it's 600 pages, and it's all-encompassing.

You may want to go back and consider, are there ways we can target the ones that you personally are concerned about, or presumably that you and others have identified are very high-risk areas, and avoid some of the overreach that seems to be going on here?

In the manual on handling, the five points puts you into the warning system, and yet there were a couple of things that were six points automatically. You know, certain ways of lifting 28-pound or more packages would put you into that. So there's a very broad reach in some of the draft that is going forward, and that is what is triggering a lot of the concern in that.

Mr. DEAR. Let me make clear, there are 26 pages of regulatory text in the 600 pages. There are 300 pages of nonmandatory advice, "how to," free, you know, so you don't need to hire an expert. The rest of that is information which is required under current statute for demonstration of significant risk, the risk assessment, the economic analysis, you know.

If some of the legislation you have been working on passes, we will probably have a couple thousand pages of that explanatory—which I'm not sure is going to add value in terms of actually improving the decisionmaking.

Mr. MCINTOSH. Sometimes the advice is very important in this process.

Mr. DEAR. But your policy question, are there ways of skinning this cat differently? I mean, you know, that's one of the things we're looking at.

Mr. MCINTOSH. Thank you for coming. I have no further questions. Since everybody else is gone, I'm going to assume they have no further questions.

The committee will stand in recess while we take this vote. We will let this first panel go and come back to the second panel.

Mr. DEAR. Thank you, Mr. Chairman.

Mr. MCINTOSH. Thank you.

[Recess.]

Mr. MCINTOSH. The committee is reconvened to order. If the second panel could come forward, please.

The members of this panel are: Mr. David Sarvadi, who is an attorney with Keller and Heckman; Mr. Howard Sandler, M.D., who is president of Sandler Occupational Medicine Associates, Inc.; C. Boyden Gray, who had to leave, was scheduled to be a member of this panel, and I would ask unanimous consent that his testimony be entered into the record; Mr. Rick Treaster, and Ms. Debbie Berkowitz, who is the director of the Office of Occupational Safety and Health, with the United Food and Commercial Workers International Union. Mr. Treaster is the president of Local 2400, Amalgamated Clothing and Textile Workers Union.

[The prepared statement of Mr. Gray follows:]



TESTIMONY  
OF  
C. BOYDEN GRAY  
PARTNER, WILMER, CUTLER & PICKERING  
AND  
CHAIRMAN, CITIZENS FOR A SOUND ECONOMY  
BEFORE THE  
HOUSE COMMITTEE ON GOVERNMENT REFORM AND OVERSIGHT'S  
SUBCOMMITTEE ON ECONOMIC GROWTH, NATURAL RESOURCES,  
AND REGULATORY AFFAIRS

July 12, 1995

My name is Boyden Gray, and I am a partner at Wilmer, Cutler & Pickering and chairman of Citizens for a Sound Economy. I served as President Bush's Counsel for twelve years, and in that capacity also served as Counsel to The Presidential Task Force on Regulatory Relief in the Reagan Administration, and co-chairman of President Bush's Regulatory Reform Working Group established in late 1991. I worked closely with Jim Miller, the first Task Force executive director in 1981, to establish the first strong White House regulatory oversight mechanism under Executive Order 12291, which was followed in virtually all critical respects by the current regulation executive order signed by President Clinton.

I want to stress at the outset that I am not here as an ergonomics expert per se, but rather as a former White House official charged with oversight responsibilities over a broad range of regulatory matters. I will try to describe how this former proposal would have been addressed by OMB and the Task Force on Regulatory Relief (and the successor Competitiveness Council) in the Reagan-Bush years in terms of the questions that would have required adequate answers before the proposed rule would have been cleared for publication in the Federal Register.

I hope also to demonstrate that OSHA has not made public sufficient information and reasoning to begin to approach the threshold showing required of a Notice of Proposed Rulemaking. In so doing, I hope to show that the ergonomics rule is a case study of the need for legislative and judicial oversight of the kind contemplated by H.R.9 and S.343. In this context I would like to commend this subcommittee for its contribution to the apparent suspension of the rulemaking effort. But I should ~~of~~ add quickly that the process for oversight and accountability deserves a rigorous legislative framework.

The approach that would have been taken to this rule in the Reagan-Bush years would have been fairly simple: Make sure that the regulatory Impact Analysis required by E.O. 12291 demonstrated a need to regulate not met by other agencies or statutes or the marketplace itself, and then if there is a need, that it be met in the most cost-effective fashion, including use of a performance standard rather than command and control. On the threshold issue of need, the question would have been phrased not whether benefits justify the costs, because that would have been inconsistent with the Supreme Court's Cotton Dust decision, but rather whether, as the Benzene decision requires, there is a significant risk of injury as demonstrated by sound science.

Put another way, do we need to regulate, and if so, are we doing it in the least burdensome fashion?

I do not believe the ergonomics rule could support a yes to either question. On the question of need, it is very

unclear to me as a layman that there is any widespread ergonomic risk at all, let alone one that is significant. It is not even clear what the proposed rule is talking about at the outset. The database of purported ergonomics injury, for example, appears to include noise related hearing impairment, lower back pain, as well as a number of other conditions which may not be work-related at all. Even if we were told clearly what injury or injuries we were trying to avoid and how many there are, and how many occur as a normal result of just daily living, we are not told with any precision what activity levels of what kind will produce the targeted injuries. There is, in other words, no risk assessment of the so-called dose-response relationship to provide any guidance for altering conduct. Indeed, OSHA staff appear to be trying to abandon the concept of dose-response entirely, thus repealing one of the basic tenets of medicine (as well as their enabling statute).

Perhaps this is not surprising. If you don't know what harm you are trying to avoid, it is pretty difficult to spell out the steps necessary to avoid that harm. So what we are presented with is a list of risk factors for virtually every activity of our professional (and private) lives that leads nowhere but to enhanced opportunities for enforcement harassment by OSHA inspectors operating without any supervisory guidelines. At least today in a general duty clause case, OSHA must make a credible scientific showing that activity A caused a medically recognized problem B. If this rulemaking had gone through, it

would have eliminated the need to show that the repeated activity of bending, picking up, standing or whatever caused anything at all.

The Reagan-Bush Executive Order would have caught this rule on both the benefit side and the compliance or cost-side of the equation. Although, as I have said, the rule would not have had to meet a strict cost-benefit test, it would have had to address a significant risk with a performance standard. Here, we neither have a measured risk nor a performance standard to guard against it. By performance standard I mean what criteria are used to define a safe workplace for, as the Supreme Court said in the Benzene case, safe is "not equivalent of risk-free." Thus, if the agency has not properly identified the injury rate that is cause for concern, then it is impossible to develop a performance standard that provides a clear benchmark for employers to meet. You can not have one without the other.

Even the agency's ability to identify the risk with any clarity would not necessarily have justified regulatory action if there are other means to mitigate that risk. Here the marketplace provides every incentive to prevent repetitive injuries because they cost money, reduce productivity and impair competitiveness. Moreover, the Americans With Disabilities Act (ADA) provides a legal incentive to prevent the generation of disabilities which then have to be accommodated. This case is thus very much different from a cancer-related case where the

long latency periods make the marketplace itself an unreliable regulator.

This is not to say that there are no repetitive injury problems in any sector of the American economy. Rather it is to say that if there are such problems, they have not been identified with any scientific or medical confidence. I am told that NIOSH is now commissioning some basic research on the actual problem itself -- and that research should proceed quickly so that scarce resources are not wasted in a scattershot fashion indiscriminately across the whole spectrum of the American workplace.

A couple of other points are worth making. The main reason why we insisted on performance standards was less for the protection of so-called big business than for the protection of small business, the worker and the consumer. Indeed, contrary to popular opinion, big business is over the short and intermediate term often the beneficiary of regulation because it constitutes a relatively unfair burden on, and an entry barrier to, competition by small business. Accordingly, there are situations where big business mistakenly supports regulatory approaches it is in their long term interest to oppose because of the long term adverse impact on international competitiveness. This shortsighted response is often referred to as rent-seeking -- that is, the taking advantage of a rule for parochial competitive reasons that have nothing to do with the public health or safety goal of the rule itself.

Because small business is the principal source of new jobs and rent-seeking disadvantages small business, we sometimes found ourselves at odds with big business in pursuing performance standards in order to eliminate rent-seeking. Command and control thus also leads to reduced competition that raises costs for consumers just as it reduces opportunities for workers. Finally, a related problem for workers is that command and control freezes technology to the technology imposed by the rule, precluding the adoption of less expensive, more innovative and more worker-friendly technology in the future.

These factors are all at work here. The unions appear to believe that they can create more union jobs with OSHA's approach by forcing employers to slow down the workplace and add more workers. What is more likely to happen, history repeatedly shows, is that employers would respond by replacing the now less productive worker with a machine, or moving the workplace itself altogether to another country with no ergonomics regulation. Needless to say, this truly disadvantages entry level, less skilled workers in the short run and ultimately reduces unionized jobs in the long run. On the question of innovation, moreover, specifying exactly how to try to identify risk factors in the workplace precludes the development of technologies that screen workers in advance for susceptibility to, say, lower back injuries, that might have a far higher success rate in preventing those injuries than a check list that does has little medical or scientific foundation.

In the end, the question comes back to the single issue -- why regulate and what is the regulation supposed to achieve? If the question can't be answered, as it cannot be here, then the regulation should be abandoned. One of the more revealing aspects of this rulemaking episode is the response of OSHA to the FOIA request for bibliographical materials collected in connection with the OSHA ergonomics standard. The answer was a non-answer, not based in FOIA. Instead of citing a FOIA exemption, OSHA simply said that it could not make the supporting materials available until OSHA had finished its work and published the standard. That is an Alice-in-Wonderland result -- verdict now, judgment later: we'll let you see what we based this standard on after we're done and it's too late to respond. But maybe I am being too cynical about OSHA's motives. Maybe they had no bibliographical references at all to release. But that explanation is even more scary, if not perhaps also more accurate, namely, that there is no medical or scientific basis for this effort.

As I indicated at the outset, one hopes that under E.O.12291 we would never have let this rulemaking waste this many agency and private resources. The Clinton executive order, however, is the same as ours in all respects relevant to this case study. So what has happened? The simple fact is that, as James Tozzi's study of the Clinton executive order shows, the White House, OMB, and the agencies simply have not followed it, and it has as a result gone largely unenforced. This is why

H.R.9 and S.343 are needed. Like S.1080 before them, these bills do nothing more really than codify the executive orders and make them enforceable in court so that they are indeed adhered to. There is something unfair about proclaiming the advent of smart regulation because of a superior Executive Order and then opposing efforts to enforce it. Yet that is what we appear to have here, and I hope this hearing will lend support to S.343 as it is pending in the Senate.



Mr. MCINTOSH. Thank you all for coming. Thank you for sitting through Mr. Dear's testimony and waiting patiently to be heard.

Why don't we start the top of this one with Mr. Sarvadi. I would ask you if you could summarize your statements. We will put the entire written statement into the record. And we will proceed with Mr. Sarvadi. Thank you.

Mr. Sarvadi, do you want to defer to Dr. Sandler.

Mr. SARVADI. I would be happy to do that.

Mr. MCINTOSH. Oh, I'm sorry. Your name tags are switched.

Mr. SARVADI. We've got them reversed. I see. OK. It was hard for me to read from the other side of the table.

Mr. MCINTOSH. No, I don't blame you. Thank you. I now know who you are. Mr. Sarvadi, go ahead.

Mr. SARVADI. Actually, you confused me, because I thought Howard was going to precede me. But that's OK, I'll go first.

**STATEMENTS OF DAVID SARVADI, ESQ., KELLER AND HECKMAN; HOWARD M. SANDLER, M.D., PRESIDENT, SANDLER OCCUPATIONAL MEDICINE ASSOCIATES, INC.; RICK TREAFTER, PRESIDENT, LOCAL 2400, AMALGAMATED CLOTHING AND TEXTILE WORKERS UNION; AND DEBORAH BERKOWITZ, DIRECTOR, OFFICE OF OCCUPATIONAL SAFETY AND HEALTH, UNITED FOOD AND COMMERCIAL WORKERS INTERNATIONAL UNION**

Mr. SARVADI. I want to thank the committee for the opportunity to participate in the hearing. I'm not here representing anybody, but I do want it known that I do work with the Coalition on Ergonomics and have done so for the last year and a half. So I'm really here because I'm an interested party and have done work in this field for about 25 years.

One of the interesting things about the conversation we heard this morning was the discussion about the injury and illness statistics and the need for a broad-based standard and the need for Government authority to require employers to do things that they wouldn't otherwise do in their own interest.

I thought it was really important to remind everybody in the room that what we are talking about here is not getting employers to do the right thing. We're talking about using the police power of the Federal Government to force employers to do things that they otherwise might not do because they don't perceive that it's necessary to do these things.

While we can disagree or agree on what is necessary to be done, asking people to do things because it's the right thing to do may not necessarily be what we want to legally require people to do. So we just want to keep that in mind, that this is an issue of a legal obligation versus what might be called a moral obligation.

The second thing I wanted to just mention briefly was the business about the statistics. We have heard a lot of numbers today.

The one thing that I would like to put into the record and make sure that it is emphasized is that the records we are talking about, these Bureau of Labor Statistics numbers, include not only injuries which are serious, things like lost workday cases, but it also includes a lot of cases where people simply complain at the end of the day, "My hand hurts," and they walk into the nurse's office,

and there is some sign, some physical evidence, that that pain is work related, that there's a redness on the hand, or that there's a lack of strength in the hand.

Under OSHA's current recordkeeping requirements, that is sufficient to put a case on the record. So of those 300,000 cases that Mr. Dear talked about this morning, I think we need to focus on the 90,000 cases that are serious, the ones that result in time away from work.

While I would agree it is important for people to be aware of symptoms so that you can deal with problems in advance, it seems to me, for the purposes of whether or not OSHA should spend one-third or more of its budget on this subject, we ought to know exactly what the numbers are.

And I think the numbers show that, while repetitive motion cases represent a small fraction of total cases. For those cases reported in 1985, there was less than one-tenth of 1 percent of the working population affected by this. It is still below three-tenths of a percent of the working population.

From a public policy point of view, the question is, where are our priorities? While the stories, the individual stories and anecdotes, are important to hear and important to take into account, public policy should not be driven by anecdotes; it should be driven by hard scientific evidence. I appreciate Mr. Dear and sympathize, and I entirely agree with his point that we should be conscious of those stories and conscious of the human cost, but we can't let that dissuade us from focusing on the things that are really important.

I think that, in regard to the ergonomics question, one of the things that I have done over the last couple of years is kind of focused on what the scientific evidence is. And with my technical background and my legal background, the thing that I have been looking for is some indication that things have changed over the last couple of years, that the information is getting harder, that the information is getting clearer, that there are some real results here that we need to deal with.

We have based our conclusions at the Coalition, regarding the scientific evidence, on a report that was made by the ANSI Committee on Cumulative Trauma Disorders, about 2 years ago, that was submitted to the record in the OSHA ANPR. And basically, the conclusions in that report were that there was not enough information—enough scientifically valid information—to be able to draw conclusions about relationships between the cases and the outcomes that we are trying to prevent, and the causes that were identified, or the so-called risk factors.

I don't know of anything that has changed in the last 2 years to suggest that those conclusions are incorrect, and I rely on the expertise of the members of those panels that reviewed that information.

One other point needs to be made about that data. One of the significant things that those committees found in reviewing the information was that, while there was a lot of information, a lot of reports in the literature about ergonomic injuries, only a very small number of those cases represented literature reports which had sufficient data to determine whether or not they were scientifically

valid. And it ranged from less than 1.5 percent of the total reports to 25 percent.

So we need to take a close look at that, and I commend OSHA and NIOSH for taking a closer look at the scientific issues. I would like to see more information released, particularly the bibliography that Mr. Dear talked about or offered in his written testimony today. We would certainly like to take a look at that information and take a closer look at what is contained in there.

I want to say one more thing about recordkeeping that is important to keep in mind here, also, for the future, and that is that the current system, while it may be the only system we have, needs to be carefully examined, because it may or may not, depending on your point of view, exaggerate the true picture. But there is a process right now at OSHA involving recordkeeping that could exaggerate the situation even more, and that is the proposal to add a column on musculoskeletal disorders to the OSHA reporting form that is the basis for the BLS statistics.

Because of the changes that OSHA is proposing, there could be an artifactual increase in the number of cases, in the number of total cases, and the number of lost workdays, which would increase the severity and make it appear that the situation was worse than it is. That is also in a rulemaking, and we're also taking a close look at it. But it could affect the ergonomics rulemaking in such a way as to distort the true picture of the situation.

With that, I see my time is up, Mr. Chairman. I will be happy to take any questions at the appropriate time. Thank you.

[The prepared statement of Mr. Sarvadi follows:]



## Testimony of David G. Sarvadi

Before the United States  
House of Representatives

Committee on Government Reform and Oversight

Subcommittee on  
National Economic Growth, Natural  
Resources, and Regulatory Affairs  
July 12, 1995

My name is David Sarvadi. The message I want to leave with you is a simple one: anecdotes like the ones we hear repeatedly about injured employees and "success stories" for ergonomics and OSHA are interesting, but when it comes time to impose legally-enforceable mandates, there is no substitute for honest, scientific analysis. Unfortunately, in the current debate over the development of an OSHA standard applying ergonomic principles to health and safety prevention, far too little of the information discussed to date has been about what we know and do not know about the human body, its capabilities, and the injuries we seek to prevent. What I hope to leave you with is a better perspective on the context in which the debate is occurring, particularly with respect to other health and safety issues.

I am an attorney, but I am also a Certified Industrial Hygienist and have been practicing in the field of occupational safety and health for twenty-five years. I received my introduction into the field of ergonomics in 1969 while studying for my masters degree in hygiene at the University of Pittsburgh's Graduate School of Public Health. I have avidly followed the development of the Occupational Safety and Health Administration (OSHA) and its regulatory apparatus since its genesis in 1970. For the past nine years, I have practiced law, focusing on occupational safety and health issues, the last five here in Washington with the law firm of Keller and Heckman. I have been involved in the development of the ergonomics standard as counsel to the National Coalition on Ergonomics. But I speak to you today, not as a representative of industry or even of Keller and Heckman, but solely on my own behalf as an interested participant in the prevention of injury, disease, and death in the workplace.

**To Tell the Truth, The Whole Truth, and Nothing But the Truth**

OSHA's story about ergonomics has the appeal of simplicity. But as we shall see, it is a simplistic vision, one that Congress should be concerned about. OSHA's current story, based on data from the Bureau of Labor Statistics (BLS), is that 60% of all reported work-related illnesses are associated with repeated trauma, and the number of cases has risen five-fold between 1985 and 1992. Such an epidemic, according to OSHA, demands a response – a comprehensive approach to solving the problem. But as we all

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know, statistics can be slippery things, telling one story when viewed through one facet of the lens, and telling a totally different story from another perspective.

The flaw in OSHA's story is that, while the facts are objectively true, it is not the whole truth. And the untold parts of the entire story paint a far different picture.

Let's start with OSHA's primary claim: a big increase in the number of cases resulted in a large percentage increase in ergonomic-related injuries -- a disturbing trend. An increase in any measured characteristic can appear to be large if the base from which one is measuring is small. In the case of repeated trauma cases, the absolute number of reported repeated trauma cases in 1985 was very low -- less than 0.1% of employees affected in a working population of roughly 81.5 million. By 1992, the total number of repeated trauma cases reported increased to approximately 0.3% of employees in the roughly 90 million employees in the covered private sector workforce. These data represent all reported cases where an employee received more than nominal treatment -- first aid -- for any strain or sprain or soreness, under the direction of a medical practitioner -- a physician, a chiropractor, or a nurse acting under the orders of a physician. So when OSHA talks about the rapid rise in the number of cases, they include not only those cases where severe injury occurs, but also cases with no lasting impact. But for the sake of the present discussion, we can concede that it is good to keep track of all these cases.

There is another deficiency in the data that OSHA does not discuss. The category of illnesses known as repeated trauma includes an unknown number of persons with apparent hearing loss. In other words, under OSHA's illness and injury reporting rules, hearing loss cases are reported in the same undifferentiated category as cases of repetitive stress injuries (RSI). RSI -- as we have come to know them through the popular press -- include conditions such as carpal tunnel syndrome, trigger finger, and similar conditions and constitute some fraction of the total number of cases. But what fraction is unknown. Isn't this a question that BLS and OSHA should answer before OSHA creates a new, complicated regime of regulation that affects all of America's workplaces? Of course they should.

Another part of the story is also left untold. It is far from clear whether the statistical increase in the reported cases reflects an increase in real injuries. There is at least some evidence that the reported increase is largely the result of the change in OSHA policy, coupled with the dramatic increase in enforcement efforts designed to get industry's attention. As the Members may be aware, multi-million dollar penalties were often assessed for failure to record cases of repetitive trauma properly according to OSHA's then new criteria.

Beginning in 1985, OSHA made a concerted effort to require employers to treat certain conditions which previously had not been recorded as recordable cases. Setting

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aside the question of whether these cases should have been recorded in any event, the result is that at least part of the reported increase over the last ten years is an artifact of the data collection and enforcement system. Yet OSHA often presents data showing that the number of RSI cases is rapidly rising -- as the attached graphic depicts for reported cases over the last ten years -- but fails to mention the possibility that the data may be skewed.

In the early 1990's, OSHA made a similar effort to get industry to report cases of hearing loss by changing the criteria for recordability. The changed criteria would have increased the number of hearing loss cases reported even if there were no change in any employee's hearing anywhere in the nation. The manner in which OSHA attempted to make the change, however, was its undoing, and is important for this Subcommittee because it reflects the agency's predilection to avoid what it perceives as a costly and inefficient process. Instead of meeting the challenge of proving their case head-on as they are obligated to do under the enabling statute and the Administrative Procedures Act, OSHA staff often engage in what I call "stealth rulemaking," by changing substantive requirements through enforcement and internal memoranda. The following describes the proposed hearing loss recording change, an example of this approach.

In 1983, as part of a rulemaking on noise exposure, OSHA determined that hearing changes (called standard threshold shifts and measured by required testing of exposed employees) would not have to be recorded. In 1990 and 1991, OSHA tried to change this determination by a "policy change" -- not by notice and comment rulemaking. Along with others, we at Keller and Heckman successfully challenged this change in policy on the grounds that because the then-current criterion was adopted as part of a rulemaking, the proposed change would also have to be subject to notice and comment, and OSHA backed off. Nevertheless, industry received the message and employers began recording, as cases of hearing loss, changes in hearing that exceeded the criteria OSHA proposed, while others continued to record at a predetermined, albeit higher, limit. The reporting criteria are presently the subject of another OSHA rulemaking.

With respect to the ergonomics proposal under development, this change in industry behavior, completely intentional on OSHA's part, may have also contributed to the increase in reported cases of repetitive trauma. I believe it is fair for this committee or Congress to ask how much of the reported increase is the result of ergonomic factors in the workplace -- OSHA's apparent contention -- and how much is an artifact of the changes OSHA made in the reporting requirements and enforcement of these obligations.

The attached graphic mentioned above illustrates how the public discussion can be affected by not telling the whole story. The computer in the graphic is misleading; an analysis of the BLS data suggests that most of the reported cases arise from work unrelated to computers. The ten industries represented 43% of the total number of

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repeated trauma cases reported in 1992. Computer work does not appear to be one of the top ten.

A closer look at the BLS data reveals a more complete picture. As discussed by Tom Leamon,<sup>1/</sup> in *Professional Safety* magazine in May 1995, in 1992, repetitive trauma cases represented a small fraction, about 4.1 percent, of total reported cases. When we look at only those cases which resulted in lost workdays -- time away from work with or without restricted activity, a commonly used measure of injury and illness severity -- the proportion of cases related to repeated trauma drops to less than 4% of the total -- 89,900 out of approximately 2.33 million lost workday cases. If repeated trauma were an increasingly important factor in the toll of occupational injury and illness, one would expect the proportion of severe repeated trauma cases to be a larger percentage of all severe cases, rather than a smaller proportion. Unfortunately, the way BLS reports the data and the amount of discussion of repetitive trauma data in comparison to other causes of injury and illness leaves the impression that these cases constitute a major source of occupational injuries and illnesses. Tom Leamon's point is well taken: BLS should stop manipulating the data and its report to make it appear that RSI is a major cause of occupational illness and injury. There are more important fish to fry.

#### The Impact of Data on Policy Choices

OSHA also appears to have been greatly influenced by these data. Of course, we do not know whether OSHA's decision to develop an ergonomics standard preceded the BLS decision to highlight repeated trauma cases. But when we analyze OSHA's overall budget for standards development in light of these data, we are compelled to ask why so much effort has been spent on this project. In 1994, OSHA budgeted \$9.1 million for standards development, of which reportedly \$3.5 million was spent on the special ergonomics team. A case of misplaced priorities? Common sense would tell us so, and most Americans do think OSHA should spend more time on accidents that kill people rather than on "ergonomics." The recent poll conducted by the Torrance Group, pollster of record for U.S. News and World Report, shows that 52% of Americans agree that fatal accidents are a higher priority; only 9% think ergonomics is an important priority. Figure 2 shows what the respondents to the survey thought should be high on OSHA's priority list.

But, OSHA says, there are 650,000 back injuries also -- hence the over 700,000 cases recently reported by OSHA in testimony on Capitol Hill -- that could be prevented by ergonomic redesign of the workplace! This assertion points up two more problems with OSHA's current approach. First, not all -- indeed, not even most -- back cases have

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<sup>1/</sup> Dr. Leamon is Vice President of Liberty Mutual and Director of Liberty's famed Hopkington Research facility. A copy of his paper is attached.



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been shown to be caused by repetitive motions or work generally. Under current rules, back cases are reported as injuries, regardless of the underlying cause. This was a decision made over twenty years ago to simplify reporting because, as is still the case today, discerning the "cause" of much of what is reported as "low back pain" is difficult if not impossible.<sup>27</sup>

Nevertheless, many of the "back" cases reported in the BLS statistics are the result of a single event, which may or may not be traumatic. Commonly reported descriptions of the cases are: hurt while lifting something, bending over to pick something off the floor or to tie a shoe, falling against something. Some in OSHA and the ergonomics community speculate that constant activity and stress on the back leads to progressive degeneration, as manifested by low back pain.

Certainly there is a kernel of common sense to this; we all feel it as we age every day. But the suggestion that work is a principal cause of this process is inconsistent with the fact that we spend as much time off the job performing the same kinds of motions -- albeit on different tasks, including hobbies and sports -- as at work. Worse, OSHA would require the entire U.S. economy to "change" the workplace on the basis of this unproven speculation, in spite of the fact that non-occupational causes of back injuries represent a significant proportion of all such injuries in the U.S. population. A major concern of employers is that, because of the loose criteria for determining that a condition is work-related -- any condition "aggravated by" work is included -- the data on back injuries is biased upward and many cases are not the result of activities at work. Indeed, all repetitive trauma injuries have significant non-occupational causes and risk factors, from obesity to pregnancy to sports to hobbies. OSHA needs to be sure it is focused on workplace injuries and illnesses.

The second problem with OSHA's approach is that the decision to do something presumes that OSHA knows what to do, that what will be done will have a material benefit on the rates of illnesses and injuries to be addressed. This is, in fact, the current statutory test OSHA must satisfy before imposing any requirement on employers. Whatever OSHA requires employers to do must result in a substantial mitigation -- if not the total elimination -- of the risk of injury or illness OSHA seeks to prevent. With ergonomics, all of the current proposals and approaches amount to mandates to experiment by trial and error: lighten the load, slow things down, try something else.

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<sup>27</sup> We should note in passing the recent report by the select committee on Low Back Pain, which says that 80% of Americans will at some point in their lives suffer from low back pain. The report also suggests that the best treatment for most low back pain complaints appears to be a short rest, then a return to activity at the individual's own pace. This suggests that perhaps a substantial part of what is reported in the BLS statistics may not be significant from an overall health perspective.

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Recently, District Court Judge Marjorie O. Rendell, in a case in Pennsylvania, cut through the pseudo-scientific fog. She refused to admit the testimony of an "ergonomist" as an expert witness under the new *Daubert*<sup>3/</sup> criteria for admission of scientific evidence.<sup>4/</sup>

The lack of a rigorous scientific underpinning for ergonomics in the current circumstance must be laid, in part, at the doorsteps of OSHA and the National Institute for Occupational Safety and Health (NIOSH). This lack of scientific support was underscored by the results of a study by members of the American National Standards Institute (ANSI) Committee on the Control of Cumulative Trauma Disorders (CTD). Notable members of this committee included Dr. Barbara Silverstein, formerly the special assistant for ergonomics under OSHA administrator, Joe Dear; Dr. Thomas Armstrong, one of the leading authorities on the subject of ergonomics, and many others, including academics, consultants, government scientists, and industry practitioners. Their conclusion -- which remains unchallenged today -- was that there were insufficient, scientifically reliable data to permit the committee to draw conclusions about risk factors, causation, and successful interventions.

The ANSI Committee, in fact, discussed the "risk factors" that OSHA included in its draft proposal released in March: repetition, duration and recovery time, force, and posture. None of the subcommittees assigned to review the literature in each of these areas could discern any quantitative relationships between the risk factors and the RSIs.

Worse, most of the scientific reports they reviewed failed to contain enough information to allow the reports to be used in the evaluation at all. The percentage of reports in the scientific literature which satisfied the Committee's reliability criteria ranged from a low of 0.6% to a high of 24%, while the number of studies considered ranged for each risk factor from approximately 150 to over 2000. Perhaps this is what is meant by "junk science."

More important were the Committee's conclusions. Basically, the experts in this field agreed that insufficient scientific information was available to determine when a

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<sup>3/</sup> In the Supreme Court decision of *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 125 L. Ed. 2d 469, 113 S. Ct. 2786 (1993), the Court interpreted the Federal Rule of Evidence 702 on the admissibility of expert scientific testimony.

<sup>4/</sup> *Juliana R. Sparks v. Consolidated Rail Corp.*, (E.D. Pa), 1995 U.S. Dist. LEXIS 6234, May 8, 1995. Questioning the relevance and reliability of the testimony, she said, "the opinions offered as to ways to increase job safety are based on logical deduction rather than any type of scientific knowledge. . . . [T]he proffered opinions are not the product of any specialized knowledge but are more akin to common sense reasoning."

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specific set of conditions would cause injury. Their conclusions state the current scientific situation most succinctly:

- Repetition - cannot identify hazardous levels.
- Force - insufficient data, not independent.
- Posture - requirements cannot be quantified.
- Work organization - unable to establish limits.
- Environmental factors - insufficient research for guideline.

As John Howard, of the California OSH Standards Board said after the decision by the BOard to reject the proposed California ergonomics standard last November, "[t]here is virtually no agreement among the affected groups on a means to effectively regulate the prevention of [CTD]."

NIOSH belatedly appears to be getting serious about ergonomics research. Recently, NIOSH announced in the *Federal Register* requests for proposals on ergonomic interventions. Buried within the criteria for assessing the proposals is the issue of the relationship between the currently-favored risk factors and the injuries and illnesses of interest. Investigators are told that, in their research proposal, "[i]ssues to consider include assessment of the level of exposure prior to the injury and . . . how the job where the injury was noted was changed to reduce the risk of injury to workers."

But a larger problem is evident in the case of OSHA's efforts to develop an ergonomics standard. I am old-fashioned enough to believe that the government -- especially the government's scientists -- should turn square corners. The failure to do so leads, I believe, to a general decline in confidence in government by its citizens. What I mean by square corners is that the people who regulate have the obligation to be scrupulously honest about what they claim the scientific evidence shows, to consider data that contradict their beliefs as well as those data that support their position. This is what is meant, I believe, by consideration of the record as a whole. Many government scientists are careful to follow their scientific training, and to identify those situations where the science is unclear and public policy considerations must take over. Increasingly, however, some of OSHA's staff seem to be willing to forego scientific rigor in the pursuit of their personal beliefs on how to achieve the goals of the OSH Act. They do this in part by manipulating the data and telling only part of the story, as in the case of the BLS numbers described above.

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There are other ways to do this. Dr. James Mills, a researcher at the National Institutes of Health, calls it data torturing.<sup>2/</sup> That is, manipulating the data so that the outcome supports the researcher's -- or, in our case, the regulator's -- point of view. This is not tolerated in the private sector, either business or academia, when dealing with the government, and it should not be tolerated in government, either. OSHA should examine the scientific evidence regarding ergonomics to determine what is known and what remains to be researched, in a public and open process, before plunging ahead to regulate American industry broadly.

Additionally, there is one more thing OSHA could do to show that it is really interested in finding out the real story. Recently, President Clinton announced a reinvention at OSHA, a change to a more open and cooperative approach. Many of us in the private sector welcomed this new effort. Unfortunately, we were greatly disappointed when, three days later, OSHA decided that its ergonomics information would not be included in the reinvention process, and rejected the FOIA request of the National Coalition on Ergonomics for the scientific information supporting its draft proposal. The Coalition is funding a scientific review of the literature on ergonomics -- something perhaps OSHA, or even NIOSH, should have done first -- and would like to review the information OSHA believes is important. In light of their refusal to release the data, one could infer that perhaps the data OSHA has does not support its action as strongly as its public pronouncements would intimate.

Finally, I would like to comment on the process that OSHA has followed in this particular regulatory area. Although some parts of the process have been visible to the public and interested parties, most of the substantive discussions from the very beginning involved a select group of "stakeholders" who were privy to what OSHA was considering. It was difficult, to say the least, to obtain copies of documents circulated by OSHA as part of these meetings, and the actual language OSHA was considering was not made public until March of this year. Until that time, we had to rely on what participants told us about the project and on a summary of the draft's provisions that was released initially in June of 1994 and revised last September. As we all know, the devil is in the details of these proposals, having the summary without the specific language led to much speculation about what OSHA was really about.

There has to be a better way, and fortunately Congress has already provided it. I believe that an advisory committee process would have permitted the broad spectrum of interested parties to participate had OSHA chosen that route. OSHA clearly has the statutory authority to create advisory committees under Section 7(b) of its own enabling statute for the express purpose of setting standards under Section 6 of the Act, but to my

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<sup>2/</sup> A copy of Dr. Mills letter published in the New England Journal of Medicine on this subject is attached.

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knowledge OSHA has rarely used this authority. In addition, the Federal Advisory Committee Act permits the executive to seek input from experts in a systematic fashion. But both the FACA and the OSH Act require such committees to operate in the open, with meetings, agendas, and to a limited extent, public participation. Congress provided these tools for a reason. I am sure I am not alone when I say I would have been happy to participate.

I would like to thank the committee for making this time available to me, and I would be happy to answer any questions.

Mr. MCINTOSH. Thank you for that.

Dr. Sandler.

Dr. SANDLER. Good afternoon, Mr. Chairman.

I'm an occupational and environmental physician, and I appreciate the opportunity to provide testimony today, as requested by the committee to do so. I have spent most of my career in occupational and environmental medicine, starting with NIOSH, and I have spent a considerable amount of time in the area of looking at medical management of cumulative trauma disorders.

I have worked with numerous companies, many of which have been cited by OSHA, and many companies that have gone forth and undertaken ergonomics and medical management programs on their own.

My remarks today will be mostly bearing on the problems in the science and the medicine as to what we know and what we don't know. Clearly, there is a voluminous amount of literature out there with all sorts of findings and pronouncements for findings that may or may not be based on good science. The literature, as it stands right now, really doesn't provide clear guidance on what are the cutoff levels, how much repetition, how much force, how much position or posture you have to have in order to have specific things.

Clearly, I have dealt with John Morrell and other meatpackers where there has been a problem. We've gone in there, and you've got to make changes. At the same time, the problem is, where on continuous improvement do you move to get what is an acceptable level? If 80 percent of the population experiences a back problem at some point in their life, what do you consider to be acceptable?

One of the other big problems that you have is with workers' compensation, use of that data. I get involved in workers' compensation cases all the time. As you know, being from Indiana, it wasn't until very recently that CTD's, in fact, were compensable in Indiana. Therefore, you get an arbitrary big rush of CTD's all of a sudden.

One of the other big issues is, a simple aggravation of something can cause it. Now, that doesn't mean, as a physician, that you ignore that. But at the same time, if a small aggravation can result in a compensable injury, then your statistics go off.

Additionally, the use of symptoms is a problem. The problems that we get involved with, for example, when you go from discomfort and fatigue and pain to a recognizable, diagnosable entity is a different ball game. That means I like to work with diagnoses. It's very difficult to tell strictly from symptoms. I mean, if you do a survey in this room right now of how many people have a pain somewhere, I'm sure certain people have more pains than others, but, additionally, it's going to be very difficult to determine at what point that occurs.

As far as trigger levels, I think that's a very important understanding. Scientifically, I can't tell you how much force and repetition and posture you need to produce something. Therefore, when it comes down to advising companies and assuring companies that, if you do this, you're going to be fine, another issue is, simply, when you start to do symptom surveys, you will find a lot of symptoms.

I just got contacted by one of the largest pharmaceutical companies in this country recently, and they said, well, they went ahead and did an ergonomic program. They started to do symptom surveys, and lo and behold, they found symptoms. Then they contacted some local physicians, hand surgeons, particularly, who wanted to surge—excuse me—cut.

And that's part of the problem that you run into is that while there is clearly a problem on the high side, high risk, high force, some of my people on my scientific advisory board, Gunnar Anderson, Steve Moore, Aruhn Garr, all these people, we know there are problems.

But Aruhn, for example, who was one of the principal architects of the NIOSH lifting guide and manual, he used a very small number of people. It has never been clinically validated, and that is something that is listed in OSHA's guidelines. They know it is not clinically validated. NIOSH just let a contract to validate, and I'm looking forward to that.

I think what OSHA has done is tremendous. I think OSHA has opened the discussion gates. I think that there is a real opportunity now to make focused research to do things and, at the same time, address the real problem areas, and there's no problem with understanding where those are. I think that's what we should be targeting.

Last but not least, I think, in terms of acceptable levels of CTD, that is what I would like to focus on briefly, and that is that I don't know what an acceptable level of CTD is. We have a problem in that I don't know how much carpal tunnel syndrome should be in the normal workplace. We do know that carpal tunnel syndrome is caused by pregnancy, rheumatoid arthritis, and many, many other things.

Some of the recent studies by Peter Nathan and other people have said that psychosocial factors are major. For example, there was a recent study by Berquist, two of them published in, I think, *March Epidemiological Journal*, which showed that there was no difference in musculoskeletal condition incidence between VDT workers and non-VDT workers, including VDT workers who work more than 20 hours a week on their jobs.

So when you start to put all this together, what I think you start to find is that there is a "loosey-goosey" area where we should be careful how we tread. We should continue to research, let's look at the real clear indicators, but not get too bogged down.

I see that my time is just about up. I thank you very much for your time and your attention. I will be happy to answer any questions at the appropriate time.

[The prepared statement of Dr. Sandler follows:]



HOWARD M. SANDLER, M.D.

**TESTIMONY BEFORE THE HOUSE SUBCOMMITTEE ON NATIONAL ECONOMIC GROWTH,  
NATURAL RESOURCES AND REGULATORY AFFAIRS  
RE: OSHA'S ERGONOMICS REGULATORY EFFORTS**

JULY 12, 1995

Good morning. I appreciate this opportunity to provide testimony today to the U.S. House of Representatives' Subcommittee providing oversight on the regulatory activities of OSHA regarding the promulgation of a health standard in the area of workplace ergonomics.

I am a physician specializing in occupational and environmental medicine. I received my bachelors and medical degrees from the University of Maryland and served as a medical officer with the National Institute for Occupational Safety and Health (NIOSH). For the past twelve years I have consulted for the U.S. Environmental Protection Agency, Consumer Product Safety Commission and other government agencies. As President of an occupational and environmental health consulting firm, Sandler Occupational Medicine Associates, Inc. (SOMA), I have assisted industry and government in assuring the safety and health of their workers through the design, implementation and management of various occupational health programs, including those involving the prevention and management of musculoskeletal disorders. For the past six years, my firm and I have consulted with OSHA under contract for the medical evaluation for placement and surveillance of its compliance officers. I publish in the medical and scientific literature and regularly lecture in various professional settings, including numerous seminars on ergonomics, musculoskeletal disorder prevention and management. I was also a coauthor for the National American Wholesale Grocers Association's "Voluntary Ergonomics Program Management Guidelines" and have consulted with other trade associations to address their industry sector's ergonomic concerns.

For the past several years, I have served as a medical and scientific advisor for the National Coalition on Ergonomics. As part of that organization, I have provided ongoing expertise for scientific analyses of the state-of-the-art of knowledge on the association of work to the development of various musculoskeletal disorders.



I am here today to address the current scientific and medical understanding regarding the prevention and management of workplace related cumulative trauma disorders, especially as they relate to the methodology used by OSHA. Any regulation should have a proper scientific basis, this is core to any congressional regulatory reform effort.

First I would like to state that ergonomics is and should be part of any business' occupational safety and health approach. Ergonomics is simply the study of work in relation to the body. I have consulted with many businesses faced with musculoskeletal disorder problems and have had successes and failures in attempting to solve the myriad aspects of their ergonomic concerns. These companies have shown genuine concern regarding the safety and health of their employees and are also aware of the tremendous costs they face from musculoskeletal problems in terms of workers' compensation, loss of productivity, and human suffering. The Coalition and its members have expressed continued and strong support for ergonomics programs that address the specific concerns of the individual workplace and critical research into the causes and effects of what has been termed cumulative trauma disorders (CTDs). They stand ready to be integral partners with all interested parties for appropriate discussion, planning and development of proper approaches addressing the prevention and management of cumulative trauma disorders.

#### OSHA'S DRAFT PROPOSED STANDARD: SCIENTIFIC AND MEDICAL ISSUES

First, I would like to comment that the ergonomics field is a multidisciplinary study of complex exposure, effects, engineering, diagnosis, treatment and rehabilitation. This complexity and the difficulty in determining how key risk factors affect musculoskeletal disorders is essential to understanding why, for example, the "bad back" has plagued the human race since we began to walk erect; and that as of today, we are still coming to grips with what causes them, why so many of us get back pain and effective ways to manage low back pain.

While it is painfully obvious that musculoskeletal problems are impacted on and by the workplace, the present state-of-the-art knowledge does not provide a sound scientific and medical basis to promulgate a broad, far-reaching standard as proposed by OSHA. From a scientific standpoint OSHA, in developing occupational health regulations, must be able to (1) determine a specific hazard (2) quantify the risk (3) select exposure levels which will prevent the hazard and (4) provide for effective exposure reduction and control. It is my opinion that OSHA has not satisfied these criteria simply because the state-of-the-art does not provide the necessary answers. While the scientific community continues to perform much needed research into cause, dose, non-workplace causation factors and successful cost-effective exposure control strategies, the critical answers necessary for comprehensive regulation are simply not

available. Nonetheless, OSHA's recent strategy was to attempt to promulgate this standard without such critical understanding and scientific justification. While there are numerous criticisms of the OSHA proposed draft standard, three overall criticisms are offered here along with five specific examples of deficiencies.

#### General Criticisms

- o FINDING -- OSHA has not performed a sufficiently objective weight-of-evidence evaluation of the musculoskeletal disorder (MSD) literature and appears to have approached the effort with predetermined expectations. The key issue is that OSHA used selective, "positive" studies and arbitrarily or otherwise dismisses negative studies.
- o FINDING -- OSHA's scientific approach to evaluation of the MSD epidemiologic literature is deficient and this deficiency introduces further lack of objectivity in its literature analysis. One issue is that in some instances OSHA relies on other authors' interpretations of these studies without doing independent evaluation. OSHA also used "methodologically-flawed" studies citing that they provided "valuable" information.
- o FINDING -- OSHA's treatment of alternative factors for MSDs lacks objectivity and is slanted toward favoring positive findings and a physical basis for MSD symptoms. Recent studies show a potentially large impact of personal psychosocial factors on MSD symptoms, yet OSHA has selectively discussed limited evidence and presents it as workplace issues, down playing individual worker psychosocial problems.

#### Specific Scientific/Medical Issues

- (1) Symptoms and ill-defined clinical entities are proposed as adverse health effects allegedly due to ergonomic risk factor exposure.
- (2) Proposed ergonomic risk factors and their "trigger" levels are used without either identification of the mix of factors or the levels of factors necessary to produce cumulative trauma disorders.
- (3) A notion of continuous improvement in the reduction of musculoskeletal disease is proposed, although no "background" acceptable rates in the population are specified.

- (4) Guidelines are included for medical management, which are inconsistent and depart from OSHA's previously accepted approach, and the NIOSH lifting equation is offered for use, although it has not withstood scientific validation.
- (5) The OSHA preliminary risk assessment justification relies on studies of symptoms and workers compensation data of dubious quality.

#### Definition of CTDs

The term CTD is not a medical diagnosis and OSHA has arbitrarily included numerous disorders whose underlying causes are multifactorial. More importantly, OSHA's proposal allows symptoms to be used as a basis for determining the presence of a work-related condition. Clinically speaking, it is difficult to distinguish between fatigue, discomfort and pain and the determination of whether OSHA can and should classify highly individualistic responses, such as fatigue and discomfort, as significant health events, should also be examined. Further, OSHA extends its definition to include aggravation of underlying disorders. It is hard to imagine anyone with pain or other symptoms not potentially aggravated by myriad work and non-work related activities. However, this is really the province of the Americans with Disabilities Act. Yet, the question remains of how industry can be responsible for producing a workplace where everyone will be pain-free, especially if they already have a preexisting condition.

#### Ergonomic Risk Factors

It has been postulated by various researchers and clinicians that risk factors such as repetition, force, body position, vibration and others are associated with the production of CTDs. However, without clear data to indicate which factors are important, in what combination and at what levels, industry, in essence faces regulation without a "permissible exposure level" (PEL) to know what a safe level for each factor and for groups of factors should be for performing a given work task. The proposed OSHA triggers are not based on scientific studies, which give clear guidance as to what might be safe. OSHA states this within their proposed standard and does not offer any insight as to how their exposure level triggers were derived. The few scientifically usable studies, which have attempted to address these issues, potentially identify a combination of high force and high repetition; but, again no clear guidance is realized from the data published to date. Thus, at the present time industry would have to guess at triggers from an exposure standpoint or use arbitrary, general (i.e., not situation specific) ones established in OSHA's draft.

### Acceptable Levels of CTDs

Another "trigger" for determination of a workplace ergonomic problem is the level of complaints of symptoms and CTDs. As previously stated, the medical community often does not know the non-work related background level for a given musculoskeletal disorder. OSHA has specified that "excessive" levels would trigger ergonomic program activation and potentially associated enforcement activities. The use of symptoms is not an acceptable manner to ascertain disease status. The National Institute for Occupational Safety and Health recently published a first effort for determining the level of carpal tunnel syndrome, one of the more well-known disorders classified as a CTD. This study relied upon the responses of workers to determine whether they had carpal tunnel syndrome (CTS) and thus the usefulness of the data is in question. CTS is one of the more difficult diagnoses to make accurately, even with highly trained medical professionals. Industry would be forced to use symptoms and simple worker complaints to try to gauge when a "problem" exists. Business would also be faced with a moving "goalpost" as to when their "problem" might be under control, i.e., what level of CTDs is acceptable.

### Questionable Guidelines

As part of its triggers, OSHA uses the NIOSH "lifting guidelines". While the second edition of the guide improves on the earlier version in better simulating the many factors involved in lifting from various positions, the fact still remains that the guide, while synthesizing the research to date and producing a lifting equation, has not been clinically validated. By this I mean, will following the lifting parameters as set forth, significantly reduce the incidence of back problems and if so, which back problems? OSHA also provides guidelines for medical management; however, while requiring, in its other health standards, that physicians determine a worker's ability to work with a certain hazard (aka preplacement medical determination), it specifically states that preplacement evaluations are not helpful in the CTD area. This is inconsistent, given the fact that once an individual has a CTD the OSHA medical management approach would have the health care practitioner determine what activities the individual can do. Clearly, business and physicians routinely perform such medical examinations and physician-based decisions are made for job placement of pilots, truck drivers, law enforcement officers and firefighters, using governmental-approved medical standards. OSHA has its own preplacement medical standards and examination program which it uses for its own compliance officers. I have consulted on this program and my present contract with OSHA supports it.

### Risk Assessment

In determining the size of the problem, the industries affected and the ability of control technologies to prevent and manage the

hazard, OSHA performed a preliminary risk assessment. As all of you are aware from the recent debate on the proper use of risk assessment in regulation, the scientific basis for this evaluation is difficult at best. Again, the use of symptoms and poor data collection techniques severely limits the gathering of information necessary to determine risk and the likelihood of controlling the underlying hazard. For example, OSHA recently changed the definition for musculoskeletal disorders from an injury to a disease. By this simple change, an epidemic of cumulative trauma disorders was instantly created. OSHA also used workers' compensation data in its risk assessment. Anyone who has attempted to control workers' compensation costs, knows that it is virtually impossible to defend a CTD claim in many jurisdictions because the rules allow for a minimal work relationship to the disease process, i.e., an aggravation, and the case is deemed to be a compensable CTD. This clearly exaggerates the risk assessment estimates. In fact, the use of this data is a surveillance tool which seeks to generate hypotheses by including the largest possible number of adverse health effects. The workers' compensation process is geared to include, as compensable, as many "injuries/illnesses" as possible; and thus, once again, symptoms are frequently all that is required to achieve benefits. Lastly, the basis for correcting an ergonomics "problem" is questionable in that many programs, some of which are extremely expensive in nature, often do not produce real diminution in symptom or disease levels. As I previously mentioned, I have been involved in both successes and failures. The one failure I would like to cite involves a big-three automotive manufacturer who, after millions of dollars, did not drop their "disorder" level; one of the reasons for which may be the recently recognized impact that workplace psychosocial factors, such as job satisfaction, has on musculoskeletal symptom reporting.

#### Summary and Conclusion

Musculoskeletal disorders have plagued mankind forever. Their attendant costs to industry, government and society are unacceptable. New approaches are presently being researched to identify risk factors, standardize recognition, treatment, and rehabilitation and provide for control or abatement of work-associated causal agents. The OSHA draft Proposed Ergonomic Prevention Standard has helped to crystallize the task we see before us. It has identified deficiencies in the science where further research is sorely needed. At the same time, these deficiencies prevent the promulgation of a broad-sweeping regulation at this juncture. My best advice is to step back and assess what can be done with the current level of knowledge, i.e., regulate specific hazards or industries, provide training and guidelines, and develop a task force from government, academia, health care, industry and labor to build on NIOSH's, OSHA's, ANSI's and other efforts to date, to set forth a coordinated research agenda with funding from all sectors. My own experience is that done right, the savings in terms

of human suffering, increased productivity and bottom line enhancement makes ergonomics a smart team investment.

I would like to thank the members of this Congressional Subcommittee for inviting me to testify on this important occupational safety and health issue, and I would be happy to try to answer any of your questions.

Mr. MCINTOSH. Thank you very much, Dr. Sandler. Our next witness—did you want to go forward, Ms. Berkowitz, or Mr. Treaster?

Mr. TREASTER. It doesn't matter to me.

Ms. BERKOWITZ. I think he can go forward.

Mr. MCINTOSH. Mr. Treaster.

Mr. TREASTER. Good afternoon, Mr. Chairman, members of the committee.

My name is Rick Treaster. I'm the president of Local 2400 of the Union of Needle Trades, Industrial, and Textile Employees. I've written a long statement. You said you would put that in your record, so I will try to summarize this as briefly as I can.

I work at Masland Industries' plant in Lewistown, PA. Masland, the company I work for, is the largest supplier of carpeting to the auto industry and has seven plants in six States. Many people today are talking about cutting back on OSHA and doing different things with the standards. I'm here to tell you about the good things that happened in my plant because of OSHA.

I'm here because I'm worried, from my own experience, if you do cut back on the regulations and the standards, about the injuries that can happen to the workers. It also may cause employers to pay out large amounts of workers' compensation, and that may cost employees their jobs. This money could be reinvested into machinery or into more paying jobs for American workers.

I worked in the molding department of Masland for over 16 years. About 6 months after I started, the company put in an incentive pay system, the Maynard system. Everything was based on—the production was based on speed and physical effort. A molder could swing a hammer 4,000 or 6,000 times a night.

I brought one of the hammers with me. This is one of the tools we use. It's two lead pipes welded together. Obviously, our accidents, our injury level was very high. I'll pass—if you want to see it, you could—

Mr. MCINTOSH. I would like to. Someone can grab it.

Mr. TREASTER. OK. I'll keep talking while she is coming.

Mr. MCINTOSH. Thank you.

Mr. TREASTER. Because of the speed we worked with those hammers and the number of times we used them, a lot of our people were hurting every day. Being a young man, and young men 20, 21 years old, we used to laugh when we would wake up and couldn't open our hands. We thought that was kind of a funny thing. Now, reaching 35, when I have to force my hand open, it's not quite so funny anymore.

People worked like that to support their families—like I said, a lot of young families. People felt like they were just machines. If we broke, the company would replace us.

Finally, a worker did file an official written complaint with OSHA, and they came in and did an inspection. OSHA found in our plant that we had many ergonomic hazards and they were very serious. There was no OSHA ergonomics standard at the time, so OSHA used the general duty clause, and they could only use that because of the number of injuries we had in the plant.

I would hate to think, if we wouldn't have had quite that many, how many people would have been hurt until we would have

reached that level. You know, if it had been 6 months or another year, we could have had dozens more workers injured.

OSHA did come in, and the ergonomics were serious, and they fined Masland, a citation and \$7,000, plus they had to fix the hazards. Masland appealed the citation, and Masland sat down with OSHA and the union to negotiate a settlement agreement. After many discussions, the company finally agreed to automate our molding line to reduce the hammers you saw and the cutting. Finally, things started to change, and we had new automated knock-outs and hands-free mold designs. Today we are roughly 50 percent free of the tool you just saw.

What did the conversion cost? At first it looked like a lot of money, but if you ask the company today, they will tell you, even though they spent thousands of dollars to do this, they have made it back many times over in higher productivity, reduced workers' compensation costs, and our quality level has also increased.

The company had other good reasons to spend the money on converting the tools, too, but it was clear to all of us, if it wasn't for OSHA, they wouldn't have made the switch. The other reasons, like workers' compensation costs, productivity, lower labor rates, were not enough by themselves.

In fact, I have a letter from one of the Masland CEO's, and it was addressed to Chairman Kassebaum of the Senate Labor and Human Resources Committee, and it says Masland Industries supports my testimony. "The relationship we have with his union and OSHA was the dominant factor in the success" that I am portraying to your committee.

So, you know, the company agrees with what I'm saying. I think that's a good step. Our company was also cited by President Clinton 2 months ago for the work they had done in reducing workers' compensation costs.

What were the results of the ergonomics program? Overall, the results have been very successful. In 1991, we started a real joint safety program committee. We looked at preventing accidents instead of investigating them after the fact, taking out some of the ergonomic hazards. The committee usually works, but we have occasionally had to go back to OSHA for help. We have also started employee involvement programs, and that's what I said earlier, using the workers' knowledge of production to improve the system and make it run smarter.

Earlier you said to Mr. Dear, about automating tools, that you were afraid it would cost jobs—with the cookie. Like I said, we have, in 50 percent of our plants now, water jets, robotic arm water jets, and we have increased our people from 230 in 1989 to 300 this year. So that's a good sign. And with today's economy, I think that's a good thing.

Overall, we're more productive. We got rid of our individual incentive program. We put in a "gain-sharing" system, and we have a decent payout for that every year. Our overall labor-management relations are better. But, then again, we can't forget how we got started. Without OSHA, it might have gone on for a long time. OSHA was the main force driving us to what we're doing now. The citation actually made my company move, so you can see why I'm here.



I've been to other plants that run with employee involvement programs, the Xerox plant in Rochester is one of them, and they have a partnership with our union. We have the same union, and they work on the same problems we do: ergonomics, quality, and productivity.

I hear the talk about cutting back on Government regulations and enforcements, like the bill by Congressman Ballenger, to give companies big loopholes to violate life and death safety standards and big cuts in the OSHA inspectors. If you don't have standards, you don't have inspectors; it doesn't make a difference. So that scares me. I don't want to see my people take steps backward to where we were 7 or 8 years ago.

Without OSHA, I don't know where we would be. Our accidents might have continued and might have cost my company enough that maybe I wouldn't be here. Maybe insurance and workers' compensation costs would have shut us down. The 300 people I support, my main goal is to keep them in jobs and be healthy.

I can't believe what I'm hearing. If you really knew what was going on in my plant and other plants that I'm associated with, what's good for the workers and employers, you would be telling OSHA to get started with their standards and you wouldn't be holding them back.

Since I started working on this, I've learned a lot more about the bills to cut OSHA. From what I've learned about the bill by Congressman Ballenger, it would turn OSHA pretty much into a non-existent thing. They really couldn't help the workers unless there was already an accident or an injury, and they could only issue warnings. That wouldn't have worked at our plant, and that's why I'm speaking here.

I was going to say it's just dumb, but that wouldn't be very polite. I just think it's inappropriate to have a bill like that, that takes away from the workers, the average guys like myself and the people I support. And the management at Masland agrees with me. That same letter to Senator Kassebaum, it's with my testimony, the whole letter.

They say, "We believe that strict, duly promulgated safety regulations are good for all. Productivity, quality, and employee turnover are just a few of the significant performance standards that are benefactors of increased safety performance and compliance with safety standards."

That doesn't mean just guidelines, or not just consultants, or recommendation; that means just what it says. We need real standards, and we need a real enforcement program to back it up. We can't make inspectors wait till after people are injured or killed to take action. This doesn't help the workers, and it doesn't help employers either.

I know that firsthand. I had a brother I watched taken out to the hospital because of an accident at my plant. When you watch a family member or friends go out to the hospital, it changes your attitude on things.

I see my time is up, but I have a couple more things I'd like to finish, if I could.

Mr. McINTOSH. Sure.

Mr. TREASTER. Maybe after what I say you won't want me to.

Mr. MCINTOSH. We welcome all points of view.

Mr. TREASTER. OK. People from Washington I don't think understand how important it is to workers in Pennsylvania and around the country. I know the people I work with in my plant and the Masland Industries plant in Carlisle, which is 700 people, that they wouldn't want this.

I know that whoever they voted for, for Congress or Senator, they would not have voted to do without the OSHA standards and inspectors. They would have never voted to let companies violate safety standards without a slap on the wrist.

Maybe Chairman Clinger or Congressmen Fox or Goodling think that Pennsylvania workers don't deserve safe plants, but I think they are wrong. I think most Pennsylvania workers believe that they deserve to have safe jobs.

Many of the injuries I talked about I think could have been set up or could have been solved by a standard. There again, we've had a lot of talk about it, and there's a lot of, "What is the standard?" So I can't say, you know. You don't understand what the standards are. Mr. Dear didn't know what the standards are. But I believe, in my industry, we need a guideline to keep my people healthy.

So I respectfully ask the committee to look for ways to help companies protect workers, keep our jobs, like OSHA did for my plant. That's what the Government is supposed to do, instead of letting companies take advantage of workers who can't defend themselves.

Thank you for this opportunity to speak, and I'll try to answer any questions the best I can at the appropriate time.

[The prepared statement of Mr. Treaster follows:]

TESTIMONY OF

MR. RICK TREASTER

PRESIDENT, LOCAL 2400  
UNITE!

Union of Needletrades, Industrial and Textile Employees

Lewistown, PA

on

OSHA STANDARDS TO  
PREVENT ERGONOMIC HAZARDS

Before the

Subcommittee on National Economic Growth,  
Natural Resources and Regulatory Affairs

House Committee on  
Government Reform and Oversight

Washington, DC

July 12, 1995

Good morning. Mr. Chairman, members of the Subcommittee, my name is Rick Treaster. I am President of Local 2400 of UNITE!, the Union of Needletrades, Industrial and Textile Employees (a merger of the Amalgamated Clothing and Textile Workers Union and the International Ladies Garment Workers' Union).

I work at the Masland Industries plant in Lewistown, Pa. The Lewistown plant produces floor mats for the auto industry. We mold full floor and trunk parts for Chrysler and Ford. We take rolls of carpet, cut them down, and bond a plastic heelpad on with electricity. We then heat the carpet mat to a certain temperature and move the mat to a press that looks like the inside of your car floor, and mold it using air and hydraulic pressure. After the molds are sealed, we cut off the excess trim. After the molding is finished, we lift the mold head and either knock out or cut out holes for the bolts that hold your car seats, and for the emergency brakes or gear-shift levers.

Masland has eight plants in Pennsylvania, Ohio, Illinois, Michigan and Wisconsin. It is the largest supplier of carpeting to the auto industry. The company's headquarters and largest production plant is in Carlisle, PA. The 900 UNITE members there -- as well as some of the 300 in our plant -- live in the district of Bill Goodling, Chairman of the House Committee in charge of the OSHA law.

Many people today are talking about cutting back on government regulations. I am here today to tell you about the good things that happened in our plant because of government regulations. I am here because if you do cut back on government job safety regulations, you will cause many workers to suffer serious injuries on the job. You will also cause many employers to pay out large amounts in workers compensation costs for these injuries. This is money which they could be spending to create good-paying jobs making products in America.

I've worked at Masland in Lewistown in the Molding Department for over 15 years. When I started there, it wasn't too bad except that it was very dark. Soon after, things changed. About 6 months after I came, the company put in the "Maynard" system. Maynard is a movement-based standard for setting production quotas. You are given so much time to finish a task, based on the specific movements for the task.

In other words, everything in production was based on speed and physical effort. Because of the speed we worked, it seemed like every night someone got hurt or injured. We had three or four people with knives and hammers working on each mold press, hitting a die up to 4,000 - 6,000 times per night. With everything based on production, we only got dies sharpened at break. For two hours until a break, a worker could hammer a dull die.

Many workers came in every day with their arms and wrists hurting. Most workers put up with the pain to support their families.

Masland held our location against us. They told us we had to produce more than other plants or we'd lose our jobs. People felt they were just machines -- if I break, they'll just replace me. Just put my clock number across my back.

Was there a better way to do it? We were trained to use both hands -- because if you used only one hand, you'd be in trouble. By using both hands to cut and hammer, you could take some of the strain off of your wrists, hands and arms. But some people could not do it with both hands, so it wasn't much good. At some point, you just wore out. You can't hit something night after night and be OK forever.

That's all there was to it. Masland never thought about changing the machinery. In 1989, before OSHA came in to inspect, a worker called OSHA on the telephone and OSHA contacted the company. The Company had been looking at various types of hammers -- using engineers from Penn State. The new hammers helped, but it still wasn't the answer.

Finally, a worker filed an official, written complaint, and OSHA showed up to do its inspection. I wasn't directly involved with the inspection, and I can get you more information if you need it. However, OSHA did find that the ergonomic hazards were serious, based upon the large number of injuries.

There is no OSHA Ergonomics Standard, so OSHA had to use the next best thing -- the General Duty Clause. And they could only do it because there were so many injuries in our plant.

I would hate to think what would have happened if the number of injuries had been a little lower. What would OSHA have said if OSHA needed more injuries to take action -- "Wait another six months until you've crippled a few dozen more workers, and then call us again."?

But OSHA did issue a citation which required Masland to fix the hazards, with a \$7,000 penalty. (See attached copy.)

Masland appealed the citation. OSHA sat down with Masland and with the union to negotiate a Settlement Agreement. After many discussions, the company finally agreed to do the most important thing -- automate the molding operation to eliminate some of the most hazardous job tasks like hammering and cutting. The company made this commitment in the Settlement Agreement.

Finally, things started to change -- with the new automated knock-outs and "hands-free" design molds. Automating the flat knock-outs was easy, but angled ones were hard so the hammers were still being used. As of today, there are no more hammers or knives, even if the work now involves more of a constant effort.

On the hands-free molds, it was harder at first. Masland started doing it with no worker involvement, and their designs didn't work. Eventually, through trial-and-error they allowed the workers to have more input and it has worked pretty well since then. Now, whenever there's a new "platform", they ask the workers and we help design the new system together. The lesson from this is clear: without the people's involvement, the new automated design never would have worked.

There were some other problems, however. The new work involves more material handling because of the change in individual workers' workloads. The company then upped production and the number of back injuries shoulder strains went up. So we then had a new -- but less serious -- set of problems to deal with.

What did this conversion to "hands-free" cost? At first, it looked to the company like a lot of money. So when they made the commitment in the OSHA Settlement Agreement, it was a big deal. They looked first to the molds with the highest rates of injury. Then, they progressed to the other molds. Today, only a few cut-and-hammer tools remain. If you ask the company, they'll tell you that even though they spent thousands of dollars, they made it back many times over in higher productivity, reduced workers compensation costs and better quality.

The company had other good reasons to spend the money on converting the molds. But it was clear to all of us that if it were not for OSHA, they would not have made the switch. OSHA was the major reason -- the other reasons, like workers compensation costs, productivity or lower labor costs, were not good enough by themselves.

In fact, here's what the management at Masland said about this last month in a letter to Chairman Kassebaum of the Senate Labor and Human Resources Committee:

Masland Industries supports [my] testimony ... the relationship we have with his union and with OSHA was the dominant factor in the success that [I] portray to your committee.

#### First Ergonomics -- then a new joint labor-management Safety Committee

What were the results of the ergonomics program? Overall the effort was very successful. As I said, we had fewer injuries, but the injuries are different -- not a "wear-out" type injury as in the past, but more serious back injuries with longer periods of lost time than before. Due to the automation, we did less hammering and cutting -- but more material-handling.

In 1991, we started for the first time a real joint Safety Committee. Finally, we aimed for prevention, not just investigating injuries or accidents after the fact. The

Company has now installed 22 spring-loaded platforms to reduce the amount of lifting. The Company hired a nurse who headed the joint safety committee. She had some background in ergonomics also. With this new structure in place, getting the Company to move on safety or ergonomics is a real possibility. She has even been promoted to a corporate position on ergonomics and risk-management to help all the plants solve their problems.

The Committee usually works, though not always. But the company always knows that if they don't listen, we will threaten to call OSHA, and then it gets fixed.

After Ergonomics, a joint approach to Quality and Productivity

In 1991, we also dropped the piecework system. Under the old system, the scrap rate was very high, and materials were 75% of the Company's production costs. We started a 10-month joint effort with the company to establish a "gain-sharing" program, focusing on Quality, Cost-reduction and "Value-Added" (a performance Standard). They called this "Working Smarter, Not Harder."

This was very controversial at our contract negotiations -- with a 50/50 split among the members. They were afraid that their earnings would drop because they would be putting out the same production with less money. But we also knew we couldn't keep beating up our bodies -- we all needed to work smarter not harder. We weren't as young as we used to be.

They didn't slow down the work -- the production didn't drop much at all. The earnings of the fast workers were frozen -- I'm making the same money I made six years ago. One-third of the workers gained, one-third stayed about the same, and one-third lost in wages.

Overall, the effects of new work design and organization have been good. We have started an employee involvement program which demonstrates this. It uses the workers' knowledge of a production system set up by the company to improve the system and make it run smarter. Our plants are very busy. In Lewistown, we've grown from 230 people in 1989 to 300 in 1994.

Overall, we're also more productive. The gainsharing program has paid out an average bonus of around 8% of plant earnings since it started.

Quality has improved, too. Last year, we received a Gold Pentastar from Chrysler for high-quality products.

And overall labor-management relations are better. Grievances are way down. We have a much smoother operation, with frequent regular consultation between labor and management. But we can't forget how we got started. Without OSHA, the old way

might have gone on for a long time. But once we got started with the safety effort, it made a big difference in all these other areas as well. It was like making the first move to get things started.

I think this is also true at other smart companies. I've visited the Xerox Corp. plant near Rochester. They also have an active partnership with our union, and they work on the same kinds of problems -- ergonomics, quality, productivity. They even win quality awards because they are serious about fixing problems the right way.

I hear all this talk about cutting back on government regulations and enforcement -- like the bill by Cong. Ballenger to give companies big loopholes to violate of life-and-death safety standards, and big cuts in the number of OSHA inspectors. This scares me. I know what our union people have gone through to get where we are. I don't want to start taking backwards steps now.

Would our company have moved the way it did without pressure from OSHA? I don't know. Maybe without OSHA our accidents would have continued the way they were. We would have cost Masland too much money on insurance and workers compensation; they would have shut down and gone somewhere else and that would have led to 300 more unemployed people in Lewistown.

I can't believe what I'm hearing. If you really knew what was going on out there in the plants -- and what was good for both workers and employers -- you'd be telling OSHA to get moving with its standards. You wouldn't be holding them back.

Since I started working on this, I learned some more about the bills to cut OSHA. I've learned that the bill by Congressman Ballenger would turn OSHA into a complete paper tiger, with no real teeth to protect workers. Under the Ballenger bill, OSHA could only issue warnings -- with no fines-- to companies that violate OSHA safety and health standards. Only after a worker was injured or killed could OSHA take any real action or issue any serious fines.

This is just dumb. Everybody knows what it takes to get the attention of a sloppy or negligent company -- it takes good inspectors with good standards and real enforcement powers, including real fines.

And the management at Masland Industries agrees. Here's what they said in their letter to Senator Kassebaum:

We believe that strict of duly promulgated safety regulations is good for all....Productivity, quality and employee turnover are just a few of the significant performance standards that are benefactors of increased safety performance and compliance with safety standards.



This means not just guidelines, not just consultants, not just recommendations.

This means a real OSHA Ergonomics Standard, and a real enforcement program to back it up.

We can't make inspectors wait until after people are injured or killed to take action. That doesn't help workers and it doesn't help employers, either.

I know, because my brother just recently suffered a serious hand injury at work. Workers and companies in dangerous jobs need help to prevent injuries, not just penalties after workers are killed or injured.

People in Washington don't understand how important this is to workers in Pennsylvania and around the country. But I know the people I work with, and I know the people who work for Masland Industries in Carlisle, PA.

And I know that whoever they voted for last year for Congress or Senator, they never voted to do away with OSHA standards and OSHA inspectors!

And they never voted to let companies violate safety standards without even a slap on the wrist.

Maybe Chairman Clinger and Congressmen Fox and Goodling think that Pennsylvania workers don't deserve to work in safe plants. But I think most Pennsylvania workers believe they deserve safe jobs.

I believe that Representative Kanjorski supports the right of Pennsylvania workers to have safe and healthy jobs.

And what about workers in Indiana. (see attached statistics from the U. S. Bureau of Labor Statistics.) Over 200,000 Indiana workers are injured on the job every year. Almost 100,000 of these injuries strike workers in Indiana's factories -- making everything from plywood to auto parts.

Even worse, over 80,000 Indiana workers are disabled from these injuries every year. In fact, about 25,000 Indiana workers suffered back injuries and repetitive motion injuries every year -- most of them in Indiana factories, hospitals and nursing homes.

Many of these Indiana workers suffer injuries that could have been prevented if there were a real OSHA Ergonomics Standard -- a standard that would get companies and their unions and their workers cooperating to fix the problems before the problems turn workers into victims.

So I respectfully ask that your Committee look for ways to help companies protect workers, and keep our jobs, like OSHA did for our plant. That's what the government is supposed to do, instead of letting companies take advantage of workers who can't defend themselves.

Thank you for giving me the opportunity to speak. I'll be glad to answer any questions as best I can.

Rick Treaster, President  
ACTWU Local 2400  
75 Foxfire Road  
Lewistown, PA 17044 717-242-0385 (daytime)

**UNITE! The Union of Needletrades, Industrial and Textile Employees**

Disabling Worker Injuries and Illnesses, 1987 - 1994

Masland Industries, Inc., Lewistown, PA

	Injuries		Repetitive Motion Cases	
	<u>Number</u>	<u>Lost days</u>	<u>Number</u>	<u>Lost days</u>
<u>Pre-OSHA inspection</u>				
1987	76	460	37	462
1988	110	955	31	608
1989	49	887	35	527
<u>Post-OSHA</u>				
1990	48	473	17	324
1991	21	33	15	206
1992	20	202	9	1
1993	29	209	9	188
1994	29	64	19	75

**Attachments to Rick Treaster's Testimony**

1. OSHA Citation to Masland Industries, Lewistown, PA; Sept. 22, 1989
  
2. Letter from Richard G. Sears, Vice President, Human Resources, Masland Industries, Inc., to Senator Nancy Kassebaum, Chairman, Senate Committee on Labor and Human Resources.
  
3. U. S. Bureau of Labor Statistics, Number of Occupational Injuries and Illnesses, Indiana, 1992.
  
4. 3. U. S. Bureau of Labor Statistics, Number of Occupational Injuries and Illnesses Involving Days Away From Work, by Event or Exposure, Indiana, 1992. (see page 2 for injuries/illness involving "overexertion" or "repetitive motion")

Occupational Safety and Health Administration  
**Citation and Notification of Penalty**  
 U.S. Department of Labor  
 Progress Plaza  
 49 North Progress Avenue  
 Harrisburg, PA 17109

3. Issuance Date 09/22/89	4. Inspection Number 001767805
5. Reporting ID 0316700	6. GS/OID R37CY
7. Optional Report No. 224	8. Page No. 9 1 of

1. Typical Violation(s)	2. Citation Number
Willful	01

The violation(s) described in this Citation are alleged to have occurred on or about the day the inspection was made unless otherwise indicated within the description given below.

10. Inspection Date(s):  
3/31/89 - 9/13/89

11. Inspection Site:  
12 Industrial Park Road  
Lewistown, PA 17044

9. To:  
Masland Industries, Lewistown Plant  
and its successors  
12 Industrial Park Road  
Lewistown, PA 17044

THE LAW REQUIRES that a copy of this Citation be posted immediately in a prominent place at or near the location of violation(s) cited below. The Citation must remain posted until the violation(s) cited below have been abated, or for 3 working days (including weekends and Federal holidays), whichever is longer.

This Citation describes violations of the Occupational Safety and Health Act of 1970. The penalty(ies) listed below are based on these violations. You must abate the violation(s) referred to in this Citation by the dates listed below and pay the penalties proposed, unless within 15 working days (excluding weekends and Federal holidays) from your receipt of this Citation and penalty you mail a notice of contest to the U.S. Department of Labor Area Office at the address shown above. (See the enclosed booklet which outlines your rights and responsibilities and should be read in conjunction with this form.) You are further notified that unless you inform the Area Director in writing that you intend to contest the Citation or proposed penalties within 15 working days after receipt, this Citation and the proposed penalties will become a final order of the Occupational Safety and Health Review Commission and may not be reviewed by any court or agency. Issuance of this Citation does not constitute a finding that a violation of the Act has occurred unless there is a failure to contest as provided for in the Act or, if contested, unless the Citation is affirmed by the Review Commission.

12. Item Number	13. Standard, Regulation or Section of the Act Violated	14. Description	15. Date by Which Violation Must Be Abated	16. F
1		<p>Section 5(a)(1) of the Occupational Safety and Health Act of 1970: The employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees in that employees were exposed to increase risk of developing cumulative trauma disorder(s) from the tasks that they were performing and administrative or engineering controls were not provided:</p> <p>(a) Molding Area, Bantries Number 1 through 13 - Molder(s), making automobile floor and trunk carpets, which involves a variety of repetitive, stressful motions of the hands, wrists, arms and shoulders, were exposed to ergonomic stresses resulting in or likely to result in cumulative trauma disorders, on or about July 24, 1989.</p>	<p>STEP #1 10/22/89</p> <p>STEP #2 11/22/89</p> <p>STEP #3 03/22/90</p>	700

17. Area Director Robert M. Fink

*Robert M. Fink*

East F

**NOTICE TO EMPLOYEES** — The law gives an employee or his representative the opportunity to object to any abatement date set for a violation if he believes the date to be unreasonable. The contest must be mailed to the U.S. Department of Labor Area Office at the address shown above within 15 working days (excluding weekends and Federal holidays) of the receipt by the employer of this Citation and penalty.

**EMPLOYER DISCRIMINATION UNLAWFUL** — The law prohibits discrimination by an employer against an employee for filing a complaint or for exercising any rights under this Act. An employee who believes that he has been discriminated against may file a complaint no later than 30 days after the discrimination with the U.S. Department of Labor Area Office at the address shown above.

**EMPLOYER RIGHTS AND RESPONSIBILITIES** — The enclosed booklet outlines employer rights and responsibilities and should be read in conjunction with this citation.

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Occupational Safety and Health Administration  
**Citation and Notification of Penalty**  
 U.S. Department of Labor  
 Progress Plaza  
 49 North Progress Avenue  
 Harrisburg, PA 17109

3. Issuance Date 09/22/89	4. Inspection Number 001767803
5. Reporting ID 0316700	6. OSHA ID R3729
7. Optional Report No. 224	8. Page No. 2 of 9

The violation(s) described in this Citation are alleged to have occurred on or about the day the inspection was made unless otherwise indicated within the description given below.

10. Inspection Date(s):  
3/31/89 - 9/13/89

1. Type of Violation(s)	2. Citation Number
Willful	01

11. Inspection Site:  
12 Industrial Park Road  
Lewistown, PA 17044

9. To:  
Masland Industries, Lewistown Plant  
and its successors  
12 Industrial Park Road  
Lewistown, PA 17044

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THE LAW REQUIRES that a copy of this Citation be posted immediately in a prominent place at or near the location of violation(s) cited below. The Citation must remain posted until the violations cited below have been abated, or for 3 working days (excluding weekends and Federal holidays), whichever is longer.

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12. Item Number	13. Standard, Regulation or Section of the Act Violated	14. Description	15. Date by Which Violation Must Be Abated	16. P
(b)		Cutting and Bonding Area, Dielectrics Number 1, 2 and 3 - Dielectric Operator(s), attaching heel pads to carpet blanks, which involves a variety of repetitive, stressful motions of the hands, wrists, arms and shoulders, were exposed to ergonomic stresses resulting in or likely to result in cumulative trauma disorders, on or about July 25, 1989.		

Among other methods, one feasible and acceptable abatement method to eliminate or reduce this hazard is the implementation of a comprehensive program for the prevention of cumulative trauma disorders. Such program would include at least the following elements:

A. Ergonomic Surveys

Perform analysis and assessment of all work operations to identify ergonomic stressors involved, including those of equipment (tools, machinery), work methods, and environmental origin.

17. Area Director Robert H. Fink *Robert M. Fink*

East F

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MASLAND Industries  
Technical Center  
47660 Halyard Drive  
Plymouth, Michigan 48170-2452  
Tel: (313) 416-8300  
Fax: (313) 416-8850 (sales)  
(313) 416-4590 (eng.)

MASLAND  
INDUSTRIES

June 20, 1995

Senator Nancy Kassebaum,  
Chair, Senate Committee on  
Labor and Human Resources  
U.S. Senate,  
Washington, DC 20510

Dear Senator Kassebaum:

I understand that one of our Masland associates, Richard Treaster, has the opportunity to testify before your committee. I want to reinforce that Masland Industries supports his testimony and that the relationship we have with his union, ACTWU, and with OSHA was the dominant factor in the success that Richard portrays to your committee.

We believe that strict enforcement of duly promulgated safety regulations is good for all. As we have improved our performance in safety statistics, we have also improved in all measurable factors in our company. Productivity, quality, and employee turnover are just a few of the significant performance standards that are benefactors of increased safety performance and compliance with safety standards.

Our organizational style is to create partnerships. Our partnering with ACTWU and other unions has expedited the continual improvement process so vital in today's business environment. Additionally, we have sought advice and counsel from OSHA and other regulatory bodies to improve our operations. I value the assistance and direction given by Regional Directors at several OSHA regions.

Recently, we had the opportunity to be recognized in Washington by the Department of Labor and the President during the recent OSHA roll out of the re-engineered organization. The Masland story is a very positive one; one of employees, unions, and government agencies, working together to benefit our people and our company.

Sincerely,

  
Richard G. Schaefer  
Vice President, Human Resources

Mr. MCINTOSH. Thank you very much, Mr. Treaster. I do appreciate your coming, particularly traveling all the way from Pennsylvania to be down here.

Mr. TREASTER. Thank you.

Mr. MCINTOSH. One of the theories in our committee is, we like to hear from people outside of Washington, whether or not they agree with my operating assumption. So I am pleased that you are here and appreciate your taking the time to do that.

Mr. TREASTER. Thank you very much.

Mr. MCINTOSH. Ms. Berkowitz.

Ms. BERKOWITZ. Mr. Chairman and members of the committee, I want to thank you for the opportunity to testify, and I also want to applaud you on bringing in and hearing from real people, which I think is so important.

I have spent the past 17 years traveling around the country forging agreements between unions and companies in the food industries to prevent cumulative trauma disorders. These are very real hazards that affect regular people, people that, for the most part, are not in very glamorous jobs; they don't get a lot of high pay. They go to work every day. They hold up their end of the American dream. They support their families.

And one day they get home, and their arm is not working, their shoulders are not working, and their life turns upside down. I think it's a real insult to the people, a lot of whom we represent in meatpacking and poultry, but also in supermarkets and health care, to minimize these problems and to sort of obfuscate what the real issue is.

Cumulative trauma disorders are the leading cause of occupational illness in the Nation. They are the most expensive disorders, more expensive than when a worker loses a limb on the job. Not only that, more people get hurt with cumulative trauma disorders than get—or about as many get hurt with cumulative trauma disorders than are affected by all hazardous chemicals in the workplace.

The thing that sort of troubles me, as a workplace health and safety advocate, is that, before OSHA even started writing this proposal, a lot of myths started being spread about it, and industry groups, who, long before OSHA actually put pen to paper, announced that the standard contained requirements, and I quote, "which are not based on what we believe to be sound science."

I just want to address one point that Mr. Sarvadi made about recordkeeping, just to clarify it, and that is, for a company to have to report a cumulative trauma disorder on their OSHA 200 log, it has to require more than first aid.

In other words, somebody can have aspirin or Motrin for 2 years, and it never has to be reported. It's not until they either have lost work time or they get to have something that is not first aid, medical treatment, which is like Cortisone shots, which means you're in a serious stage of cumulative trauma disorders.

One thing about these disorders—and I know this goes against the grain of your philosophy—is, their costs to workers and companies are very high. But even though the cost to companies was incredibly high, it was not until OSHA stepped in, under President



Reagan and President Bush, and started doing major enforcement cases, that industry began paying attention to them.

Nowhere is this sort of thing home more than in the industry we represent, in the meatpacking industry, which was bleeding from the cost of work-related injuries and illnesses. And you know very well that meatpacking and poultry have a very, very slight profit margin, maybe 1 percent.

Yet, despite the high incident rates and the enormous cost in workers' comp and lost profit activity to this industry, which we constantly kept documenting to the industry, it wasn't until OSHA got involved that the meatpacking industry and poultry began to take action to prevent these disorders.

In fact, Kenny Monfort, who is about to resign as the head of Monfort, which was the largest meatpacking company, and the head of the American Meat Institute at the time, said in an interview that it wasn't until OSHA started keeping statistics that they realized how bad they were on cumulative trauma disorders.

In 1988, OSHA cited the largest meatpacker at the time, IBP, for failing to reduce cumulative trauma disorders. What was more noteworthy than the fact that it was a \$1 million fine was the company's response. The company settled the case with OSHA, dropped their challenge, and began an unprecedented and highly successful, multiyear effort to reduce disorders in the 20 plants that they owned.

The results were dramatic. The incident rates were halved. Surgery rates dropped by 40 percent. And even more, the company's workers' comp cost dropped dramatically, over 50 percent, from 1988 to 1993, saving the company millions and millions of dollars.

After this experience, OSHA went in to 20 other meatpacking and poultry plants, including some in Indiana, over the past 7 years, and found the same extent of violations. Even though IBP was successful, it didn't carry forward. But the sort of wave of OSHA action did move forward, and companies started putting in programs.

In the wake of all the OSHA activity and the accompanying news media, many companies started doing this voluntarily, companies like AT&T, General Electric, John Deere, and Red Wing Shoe in Minnesota. In each of these companies, the cumulative trauma disorder rates went down, and the company saved money.

Now, other witnesses have come before this committee today and argued that cumulative trauma disorders may not be terribly real hazards, or it's very hard to figure out when it's really a disorder and it may just be fleeting pain, but the experience of corporate America is very different.

Why would companies like Levi Strauss, IBP, Ford, GM, and Sara Lee spend so much on abating these hazards if they weren't real? Not only are these real hazards, but you can put in real solutions, and you can save money.

One of the things that I invite you to do is to come to work in a meatpacking plant or a poultry plant to do a job like pulling leaf lard or chuck boner, and then you will get a sense of how you know when there's a CTD that is going to occur and what a job is like that can cause a CTD.

And I also want to let you know that in many of these jobs, especially in poultry, the answer to these problems is automation, and the workers welcome it, and so do the companies. And we haven't lost jobs. What we have done is prevented injuries and illnesses.

I just want to let you know that the whole standard-setting process on ergonomics started under the Republicans. It started with an industry petition itself to OSHA for a standard. They asked OSHA for a standard. Why? Because in the absence of a standard, there were virtually no guidelines for the company to use to achieve compliance, and they wanted a standard.

In 1992, Dottie Strunk, then the Acting Assistant Secretary for OSHA, began the formal process of writing a standard. She is now the leading spokeswoman against the process.

The need for a standard was also propelled forward in 1992, when an administrative law judge hearing the only OSHA CTD case that had gone to trial, overruled OSHA on these types of citations and said, "The Secretary of Labor must promulgate a standard to cover this very serious citation, and you cannot rely on the use of the general duty clause."

I just want to finish by saying, I was a stakeholder at two of the meetings that OSHA had over the last year on this ergonomic proposed rule, and I really applaud OSHA for doing this. Because, under the Reagan and Bush years, we were never allowed to see any drafts of anything until it showed up in the Federal Register. So this is a very new and open administration, and I welcome that.

But in the two meetings that I was at, and there were representatives of the auto, packinghouse, poultry, and meat industry, none of the industries had any problem with OSHA's writing a proposal.

I think what is important to remember here is that these disorders are real, that industry has and can prevent them, and that they have only done so in the wake of OSHA's efforts. If you deny the Government the ability to focus on these disorders through enforcement, guidelines, and regulations, you will assure that these disorders will take an even bigger toll on both this Nation's workers and its industries.

Thank you.

[The prepared statement of Ms. Berkowitz follows:]

**Testimony of Deborah Berkowitz  
Director, Office of Occupational Safety and Health  
United Food and Commercial Workers International Union**

**Before the  
House Subcommittee on National Economic  
Growth, Natural Resources and Regulatory Affairs**

**Room 2154, Rayburn**

**Committee on Government Reform and Oversight  
on  
OSHA's Regulatory Process and Activities Regarding Ergonomics**

**July 12, 1995**

Mr. Chairman and members of the subcommittee, my name is Deborah Berkowitz and I am the Director of Health and Safety for the United Food and Commercial Workers International Union, which represents 1.4 million workers in the United States and Canada, including over 135,000 in the meatpacking, poultry and food processing industries. The bulk of my professional experience has been spent working with the various companies within our union to prevent job hazards. In the past 15 years, the number one job hazard facing our members has been cumulative trauma disorders (ctd's).

Cumulative trauma disorders are not only painful and debilitating diseases, they are also costly -- to both workers and companies. From productivity losses on the factory floor to medical losses -- the costs of these disorders run very high. Take carpal tunnel syndrome, for example, where medical costs alone can run as high as \$20,000 a case -- and this does not take into account the costs of lost time or lost productivity. This month's publication of CTDNEWS based in Haverford, Pennsylvania estimates that American employers spend more than \$7.4 billion a year in workers compensation costs alone on ctd's, and an untold additional billions on medical treatment and lost productivity. With hundreds of thousands of new cases each year, these disorders are taking a huge bite out of a company's bottom line.

Yet, despite the enormous costs, it was not until the Occupational Safety and Health Administration (OSHA) began focusing their enforcement efforts during the Reagan and Bush Administrations on these job hazards that most industries began paying attention to them. Nowhere is this harder to believe than in the industries I am most familiar with -- meatpacking and poultry. In meatpacking, for example, despite overall plant annual injury and illness rates running between 30-50% in any given plant (i.e. between 1/3 and 1/2 of workers suffered a serious job related injury and illness each year) -- preventing job hazards was always a back burner issue. The former chairman of the American Meat Institute, Kenneth Monfort, summed it up best in an interview with the Chicago Tribune in 1988 when he said: "I guess there was a little thinking that packinghouse work was tough and hard and dangerous, and that's just the way it's gonna be." In the late 1980's, cumulative trauma disorders began to replace knife cuts as the number one hazard in these plants.

Meatpacking, in fact, has the distinction of having the highest incidence of cumulative trauma disorders in the nation -- with the industry reporting over 15,000 new cases a year. With the average packinghouse workers making up to 20,00 cuts a day on their job on meat, that is frozen and hard, rates of cumulative trauma disorders began to skyrocket. Again from Kenneth Monfort in that same interview: "It's obvious that we (the meat industry) probably accelerated the problem (cumulative trauma disorders) in the last 10 or 15 years as we broke down the jobs into pieces and said you do this one thing all day....I don't think most of us knew how bad we were."

But, despite the high incidence rate and the enormous costs to the industry in workers compensation and reduced productivity, it was not until OSHA got involved that the meatpacking industry began to prevent these cumulative trauma disorders. Responding to dramatic testimony from packinghouse workers at a Congressional hearing in 1987 about unsafe conditions in a packinghouse owned by IBP, one of the largest meatpackers in the country, OSHA initiated a major investigation into safety conditions at the plant. The result in 1988, was the first million dollar fine for failing to reduce cumulative trauma disorders.

Even more noteworthy than the fine, was IBP's response. They settled the case with OSHA, dropping their challenge, and then began a multi-year effort to reduce these disorders in the approximately 20 plants that they owned. And they did not take short cuts or waste time blaming workers for these disorders. At their flagship plant in Dakota City, they along with the union, formed working committees and hired experts to begin the process of redesigning hundreds of jobs to reduce these serious job injuries.

The solution lay in applying the science of ergonomics, which meant redesigning those aspects of a specific job task that contribute to these disorders -- such as working with your hand above your head, or working with your wrist in a bent position while doing forceful job tasks. The results were dramatic. The first year after job changes were made, ctd cases were reduced by half at IBP, and the number of related surgeries dropped by 40 percent. IBP's workers compensation costs also dropped dramatically -- over 50% between 1988 and 1993.

Examples of ergonomic job changes that were made in the plant were: Vacuum hoists -- installed in areas where workers had developed serious back injuries from manually lifting thousands of pounds of boxed meat every day; Hydraulic adjustable stands were built to prevent workers from having to physically move cutting saws up and down while making cuts in sides of beef. Now the stands move up and down, allowing the workers to saw rather than lift; Overhead conveyor belts that forced workers to throw slabs of meat above their heads over 3,000 times a day were lowered. Workers now push the finished product through a hole onto a conveyor belt running under the worktable. The result: disabling cumulative trauma disorders of the shoulder and back were reduced dramatically.

IBP's successful experience with reducing cumulative trauma disorders, however, did not propel the rest of the industry to move forward. It took another 20 OSHA inspections, made over the past 7 years, for a significant portion of the meat and poultry industry to begin true efforts to reduce these disorders. And the results were impressive.

At Cargill, a major poultry company cited by OSHA, their efforts to reduce these disorders has, and I quote from Broiler Industry Magazine "yielded very good results -- the plant's comprehensive health care costs have decreased 280% since 1989."

Or take Perdue Farms, that saw workers compensations costs at its two North Carolina plants, decreased by 70 percent since 1989 when the state cited the poultry processor for failing to reduce cumulative trauma disorders.

Despite the obvious success of these company efforts, many companies in the industry have still, to this day, not implemented serious efforts to tackle these disorders.

OSHA's limited, but highly publicized enforcement activities during the late 80's and early 90's also propelled many other companies to take a hard look at how to prevent these disorders. For the first time, trade magazines and the general media began reporting on how to prevent these disorders -- and the term "ergonomic program" was coined.

From General Electric in Ohio, that implemented a major ergonomics program in 1991, to a Sara Lee Bakery in New Hampton, Iowa, that told the Wall Street Journal that despite spending money on redesigning jobs it had overall saved \$750,000 a year in lowered workers compensation costs, to Red Wing Shoe in Red Wing, Minnesota, that implemented an aggressive ergonomics program to reduce these disorders and has reduced workers compensation premiums by 70 percent since 1989 -- the reports from all over were consistent that **preventing these disorders saves money!!!**

Yes, it costs money to install improvements -- but from John Deere in Moline, Illinois, to AT&T in San Diego, California -- **money was being saved when the companies embarked on efforts to reduce cumulative trauma disorders.** At John Deere solutions implemented included using tilt devices so employees don't have to reach overhead, bend over or crawl under machinery to work. At the AT&T's San Diego facility, that designs and manufactures three different mainframe computers, changes on the job to reduce these disorders resulted in workers compensation losses plunging from \$400,000 in 1990, to \$8,600 in 1994!!

These are but a few of the scores of examples in our files. Yet, in my 15 years of working with companies on these issues, I have never seen a story documenting a company's effort to reduce these cumulative trauma disorders -- through ergonomic job changes -- that did not work. Industry lawyers and doctor's can come before you today and argue that cumulative trauma disorders do not exist -- or that ergonomic programs are ineffective -- but the experience of corporate America truly renders these hollow declarations. The meatpacking industry, which - believe me - has never spent money to just appease workers, has spent millions of dollars preventing these very real job hazards -- and they have been repaid many times over in savings. **Corporate America's experience is that these are very real job hazards -- and that ergonomic solutions work!!**

And further, industry is addressing these job hazards because of OSHA.

OSHA's efforts concerning cumulative trauma disorders, in fact, as I stated before, were all started during the previous Republican Administrations. In 1988, OSHA received a petition from employers requesting that OSHA develop a standard concerning ergonomic issues. In 1990, former Secretary of Labor, Elizabeth Dole, announced that the Department of Labor had decided to develop a permanent standard on cumulative trauma disorders. In that same year, OSHA, under direction from the Secretary published guidelines for the red meat industry on how to prevent these disorders through the implementation of ergonomic solutions. The following year, the Secretary of Labor established the Office of Ergonomic Safety Standards "specifically to develop a uniform regulatory approach to ergonomic hazards in the workplace" (from letter dated April 17, 1992 from Lynn Martin to William Wynn). Then in 1992, Secretary of Labor, Lynn Martin announced that OSHA supports initiation of Section 6(b) rulemaking to address cumulative trauma disorders and will be publishing shortly an "Advance Notice of Proposed Rulemaking (ANPR) in order to gather information needed to develop a proposed standard on ergonomic safety and health." Then in August of 1992, Acting Assistant Secretary Dottie Strunk, began the formal process of writing a standard by publishing in the Federal Register OSHA's intent to write a standard on ergonomics and asking the public for comment. In this Advanced Notice of Proposed Rulemaking, Ms. Strunk stated: "In recent years there has been a significant increase in the reported cases of cumulative trauma disorders in the workplace.....In response to this, as well as other available information, OSHA is announcing the initiation of rulemaking under section 6(b)5 of the OSHA act."

The need for a standard was propelled forward in 1992 when an Administrative Law Judge, hearing the only OSHA case on CTD's to go to trial, overruled OSHA because, on these type of violations, and I quote: "The Secretary of Labor must promulgate a standard to cover this very serious situation – and cannot rely on use of the general duty clause of the law to issue such citations." [Over the past 20 years, OSHA had relied on this clause in the law to cite employers for failing to reduce ctd's]. The judge in the case went on to remark, with insight, in his decision that "I recognize of course that the very employers who are bitterly attacking 5(a)(1) (the general duty clause) and are arguing for the promulgation of a standard are the very industries that will come in and fight the creation of the standard and promulgation thereof, to the utmost."

Of note in this case, *Pepperidge Farm vs. the Secretary of Labor*, the company brought in Dr. Norton Hadler as their key witness to discredit the government's evidence that cumulative trauma disorders were a serious work related injury. The judge, after hearing his testimony, wrote in the decision that he found Dr. Hadler's testimony flawed. In fact, the judge concluded that after reviewing and analyzing all of the medical evidence "I find that a preponderance of the evidence demonstrates that the work activities on the line at the biscuit division was at least the precipitating factor in the disorders suffered by the employees on the line.....Further, I also find that the hazard was causing or likely to cause, serious physical harm." Thus, in the only ctd case to go to a hearing, a judge overruled Dr. Hadler's line of thinking and established the veracity of ctd's being work related, serious disorders.

The Clinton Administration, for their part, attempted to continue working on the rulemaking initiated by the previous Republican Administration to prevent cumulative trauma disorders. This Administration continued the extensive outreach effort begun under the Republican Administration to continue to get input from interested industry parties on this rulemaking. But truthfully, little progress has been made in the standard -- contrary to what industry has stated.

Using the comments OSHA received from the Advanced Notice of Proposed Rulemaking under the Bush Administration and information provided by industry during subsequent meetings, the staff at OSHA came up with a 26 page double, spaced draft, proposed standard -- along with a draft copy of the massive supporting documentation required of the agency to support a proposal in the Federal Register. Prior to sending this proposal to the Assistant Secretary's desk for review, the staff opted to gain even more input from industry, insurance groups and other worker health and safety groups -- and held a series of meetings across the country. And today as we speak, that is still all that OSHA has -- a draft of a proposal.

For those of you unfamiliar with OSHA's regulatory process, this draft proposal first must be approved by the Secretary of Labor and the Office of Management and Budget. It then must be published as a 'proposal' in the Federal Register where OSHA must receive comments and conduct public hearings on this proposal. At OSHA, this usually takes 5 years. After this lengthy public hearing process, OSHA then writes and publishes a final rule.

This is clearly not the case of overzealous bureaucrats trying to enrich themselves, as other witnesses at this table have remarked in recent speeches. This is an Administration slowly, and carefully moving forward on a rule making process started and nurtured by Republicans in response to industry requests. Further, the bureaucrats working on this bi-partisan initiative have made it their priority to continue to solicit input from affected parties -- as opposed to shutting out those this regulation could effect.

The problem however, is that in the absence of a standard requiring companies to reduce cumulative trauma disorders, these disorders will continue. OSHA's activities on ergonomics is not about abstract science or statistics, it is about real people. Real people like Gloria Williams from Mississippi, Evelyn Miller from Maryland, or William Buck from upstate New York. Each of these are workers who held up their end of the American Dream -- they went to work each day and supported their families. And then, due to the rigorous design of their jobs, their hands and arms stopped working.

Gloria Williams was 28, the mother of three children, who worked to support herself and her family in a catfish plant in Mississippi. She worked on the fillet line making three cuts every ten seconds, for 8 hours a day 5 days a week. Then her right hand started hurting bad. The pain got worse and worse. Soon she couldn't hold things at home -- like combing her daughter's hair or even her kids. Then one day she couldn't grip her knife. The company refused to send her to a doctor and told her to go home. One year after her testimony, this plant was cited by OSHA for failing to reduce cumulative trauma disorders, and began an effective ergonomics program.

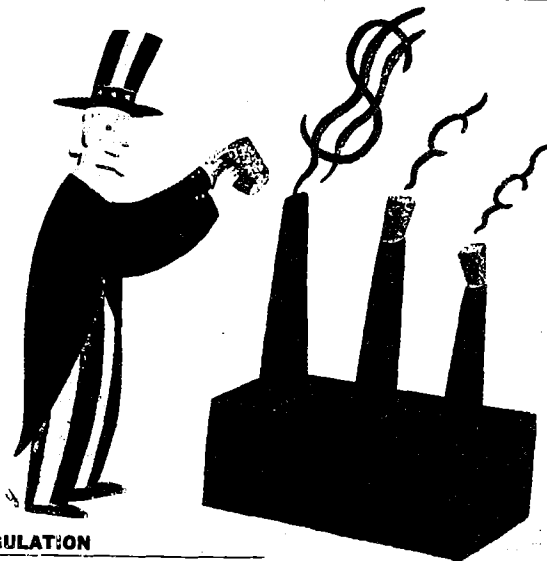


Evelyn Miller worked in a poultry plant on the Eastern Shore of Maryland snatching guts until her hands began to go numb. She was diagnosed with carpal tunnel syndrome in both hands – and given permanent restrictions. Her hands were so bad she couldn't open baby food jars for her kids, hold the plates to set the table, or pick up pots and pans.

William Buck worked as a meatcutter in a supermarket in upstate New York. All the repetitive knife work on his job ruined his shoulder. He had to leave his job long before he was planning to retire – giving up not only his lifes work, but his savings and his planned retirement.

Behind every statistic is a real person: a mother, a father, a neighbor. Workplace injuries and illnesses are real, and they take a real toll on both this nation's workers and its industries.

## Science & Technology



REGULATION

# ARE REGS BLEEDING THE ECONOMY?

Maybe not. In fact, they sometimes boost competitiveness

**T**o the Republican Congress, regulations are like a red cape waved in front of a raging bull. "Our regulatory process is out of control," says House Science Committee Chairman Robert S. Walker (R-Pa.). He and other GOP leaders charge that nonsensical federal rules cripple the economy, kill jobs, and sap innovation. That's often true: Companies must spend enormous sums making toxic-waste sites' soil clean enough to eat or extracting tiny pockets of asbestos from behind thick walls.

That's why GOP lawmakers on Capitol Hill want to impose a seemingly simple test. In a House bill passed earlier this year and a Senate measure scheduled for a floor vote in July, legislators demand that no major regulation be issued unless bureaucrats can show that the benefits justify the costs. "The regulatory state imposes \$500 billion of burdensome costs on the economy each year, and it is simply common sense to call for some consideration of costs when

regulations are issued," says Senate Majority Leader Bob Dole (R-Kan.).

That sounds eminently reasonable. But there's a serious flaw, according to most experts in cost-benefit calculations. "The lesson from doing this kind of analysis is that it's hard to get it right," explains economist Dale Hattis of Clark University. It's so hard, in fact, that estimates of costs and benefits may vary by factors of a hundred or even a thousand. That's enough to make the same regulation appear to be a tremendous bargain in one study and a grievous burden in the next. "If lawmakers think cost-benefit analysis will give the right answers, they are deluding themselves," says Dr. Philip J. Landrigan, chairman of the community medicine department at Mount Sinai Medical Center in New York.

There's a greater problem: The results from these analyses typically make regulations look far more menacing than they are in practice. Costs figured when

DAN YACCARINO

## Science & Technology

a regulation is issued "almost without exception are a profound overestimate of the final costs," says Nicholas A. Ashford, a technology policy expert at Massachusetts Institute of Technology. For one thing, there's a tendency by the affected industry to exaggerate the regulatory hardship, thereby overstating the costs.

More important, Ashford and others say, flexibly written regulations can stimulate companies to find efficient solutions. Even critics of federal regulation, such as Murray L. Weidenbaum of Washington University, point to this effect. "If it really comes out of your profits, you will rack your brains to reduce the cost," he explains. That's why many experts say the \$500 billion cost of regulation, bandied about by Dole and others, is way too high.

Take foundries that use resins as binders in mold-making. When the Occupational Safety & Health Administration issued a new standard for worker exposure to the toxic chemical formaldehyde in 1987, costs to the industry were pegged at \$10 million per year. The assumption was that factories would have to install ventilation systems to waft away the offending fumes, says MIT economist Robert Stone, who studied the regulation's impact for a forthcoming report of the congressional Office of Technology Assessment (OTA).

**WORTHY LOSS.** Instead, foundry suppliers modified the resins, slashing the amount of formaldehyde. In the end, "the costs were negligible for most firms," says Stone. What's more, the changes boosted the global competitiveness of the U.S. foundry supply and equipment industry, making the regulation a large net plus, he argues.

While federal rules that improve bottom lines are rare, regulatory costs turn out to be far lower than estimated in case after case (table). In 1980, the price tag for reducing emissions of sulfur dioxide—the cause of acid rain—was pegged at \$1,000 per ton by utilities, the Environmental Protection Agency, etc. Yet today the cost is \$140

per ton, judging from the open-market price for the alternative, the right to emit a ton of the gas. Robert J. McWhorter, senior vice-president for generation and transmission at Ohio Edison Co., says the expense could rise to \$250 when the next round of controls kicks in, "but no one expects to get to \$1,000." The reason: Low-sulfur coal got cheaper, enabling utilities to avoid costly scrubbers for dirty coal.

Likewise, meeting 1975 worker-exposure standards for vinyl chloride, a major ingredient of plastics, "was nothing like the catastrophe the industry pre-

dicted," says Clark University's Hattis. He found in a study he did while at MIT that companies developed technology that boosted productivity while lowering worker exposure.

**Regulation Isn't Always a Costly Burden**

Many firms find ways to reduce the burden of regulation by developing new products and processes.

**VINYL CHLORIDE**  
Reducing worker exposure to this carcinogen was predicted to put a big chunk of the U.S. plastics industry out of business. But automated technology cut exposures and boosted productivity at a much lower cost.

**ACID RAIN**  
Efficiencies in coal mining and shipping cut prices for low-sulfur coal. Utilities spend just \$140 per ton to remove sulfur dioxide, the predicted \$1,000.

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**"If lawmakers think cost-benefit analysis will give the right answers, they are deluding themselves"**

**Mr. MCINTOSH.** Thank you very much, Ms. Berkowitz.

Again, I thank all of the panel for coming and persevering with us. I have a couple questions for several of you.

**Ms. Slaughter,** welcome. I appreciate that.

First of all, Mr. Treaster, let me mention to you—because I've been working with Mr. Ballenger on OSHA reform—the purpose there is actually to create incentives to replicate the experience that you had in your factory, where there were problems that were identified. In that case, they had a fine, and that triggered the response of the management and the union to work together to try to identify and come up with a solution to it.

There are other cases where people feel very strongly that the fine is issued really as a punitive matter. And what Mr. Ballenger is seeking to do is, by first giving people an opportunity to correct the problem, with a warning citation, to give people in the industry and in labor an opportunity to work it out and try to reach a solution before the Government comes in with a punitive fine.

So look into it a little bit more. It's not exactly the topic of this hearing, but I have been working with him somewhat on that legislation, and the goal, at least, is to replicate the type of behavior that you described that was successful in getting movement toward greater safety on that.

**Mr. TREASTER.** I understand that. My company is fairly progressive. I deal with a lot of other people who I talk to at union functions, and I've been around to a large variety of companies. My company is pretty progressive, and it took that fine to get them going. Without being penalized, some people just aren't going to move.

Like Mr. Dear said, and I agree with that, I've seen companies that are very progressive and they are far beyond anything OSHA could do for them. My company is heading that way in a hurry. We have pretty much bypassed that. But there are people I know that their companies aren't going to move unless they are kicked in the butt.

**Mr. MCINTOSH.** But don't you think, if your company is actually saving money and is more productive, that you are going to put them out of business?

**Mr. TREASTER.** Pardon?

**Mr. MCINTOSH.** Well, I mean, if your product is more competitive because of these changes, and they are able to lower the costs of workers' compensation, and so forth.

**Mr. TREASTER.** A lot of the companies in my union don't do what I do with the auto industry. A lot of them are sewers, needlework people, and our union has a wide variety of people we're not actually in competition with. Those companies, I guess, just aren't aware of that. They are not bright enough to figure it out.

**Mr. MCINTOSH.** Let me switch, because we are limited in time and what we have to do. There were a couple of numbers that I wanted to try to reconcile and make sure I understood. Mr. Treaster and Ms. Berkowitz both mentioned that—first of all, I guess Ms. Berkowitz mentioned that she thought the most significant workplace injuries or disorders were in the area of ergonomics.

And yet Mr. Sarvadi was saying that three-tenths of a percent—and I want to make sure I have the statistic right—is that three-tenths of a percent of all of the injuries or all of the population?

Mr. SARVADI. Of the population at risk, of the 90 million or so, or 95 million people employed in the United States, less than three-tenths of 1 percent suffer anything like a reportable case related to repetitive motion injury, repeated trauma injury.

Mr. MCINTOSH. I guess, if that's the case, is that also the most frequent reported type of injury?

Mr. SARVADI. It is the most frequently reported illness. It is not the most frequently reported injury. Mr. Dear referenced some 700,000 cases a year. That figure includes back cases, which can be caused both by—at least in theory—by repeated trauma but also by single events.

Somebody falls against the side of the table here and injures their back, those get categorized that way, because when the system was set up 25 years ago, we did not know enough about back injuries to be able to do the diagnosis and causation analysis that would allow us to distinguish between a back injury caused by a single event and a back injury caused by repeated lifting or repeated activity.

And I think part of our problem is that, at least based on some of the information coming out of the Health and Human Services Low Back Pain Committee, that we still do not know enough about back injuries, in every case, to be able to clearly segregate those which are repeated trauma and those which are single injury caused.

So the real question that we have to deal with is, and one of the difficulties in this area, is that these numbers keep getting thrown out in very, very unspecific ways. We're not clearly stating the problem. We've merged together all back injuries and all repeated trauma injuries that are reported to BLS, in order to get the number up to a significant figure.

Clearly, there have been some situations recently where there has been an increasing trend in reported cases. The question is whether or not that increasing trend is the result of a real increase in injuries. And in some industries, as illustrated by Ms. Berkowitz' and Mr. Treaster's testimony, there may be some industries where, in fact, the number of cases is real and is increasing.

But, by the same token, there are, I think, a lot more industries where the number of repeated trauma cases is not increasing; that, in fact, lost workday cases today, as a percentage of total reported cases, is about one-third, where, in 1983 or 1984, it was about one-half of all reported cases.

So, while the number of cases seems to be relatively constant, the total number of reported cases to BLS seems to be relatively constant, the number of serious cases is dropping. And I think it's fair to ask whether or not we need a broad-based standard or whether we need one that would focus solely on those industries where there is a significant problem. Clearly, there is a way to get at that question, and that is to look at the top 10 or top 20 industries that BLS reports.

Mr. MCINTOSH. Maybe do it in a phased setting.

I want to respect the clock, so I want to turn to Ms. Slaughter.

**Ms. Berkowitz**, do you have any comments on that?

**Ms. BERKOWITZ**. No. It's sort of how BLS looks at that.

Remember, this is all industry-reported data, so there is also the factor of how accurate that is. But if you look at all the causes of occupational illnesses and injuries, what I said is, repetitive trauma disorders is the single largest cause of these disorders. There's a whole chunk of injuries and illnesses that are caused by contact with an object, but that could be machine guarding, lockout, falling, falling from a ladder. There are, you know, hundreds of different causes within that.

So if you just look at specific causes, then cumulative trauma disorders in the workplace—and I guess my point is that I don't think these are everywhere, and I don't think OSHA ever thought that they were everywhere. And, I mean, I've seen these OSHA drafts floating around. I think OSHA is still trying to figure out how you get to where the problems are but, you know, not sort of exclude, you know, the one or two plants in a certain industry where there is a lot of problem, but that industry is OK, and for some reason they are having a problem.

I think that's difficult, and they are struggling with it. Before they even—

**Mr. McINTOSH**. They have ignited a huge opposition by getting very broad in their reach. So I appreciate your insight that they are struggling with that.

Let me now turn to **Ms. Slaughter**. I appreciate your coming. Any questions you have or statements?

**Ms. SLAUGHTER**. Thank you, **Mr. McIntosh**, I'm glad to be here.

**Ms. Berkowitz**, I remember quite clearly, when I was first here in Congress on this committee, despite hundreds of hearings later, the one that sticks in my mind more is the one about IBP. The workers came in, and they evoked for us what it was like to work in a plant where there was fat from the animals, grease, blood all over the floor, easy to lose your footing, repetitive motions with the knives, in addition to the danger.

The young people who came in, in their early twenties, who were lame for life because their job was to stand at the bottom of the chute and, as the cattle came down the chute, hit them in the leg, hip. They all came in on crutches, as I recall.

If I remember correctly, in that one small town, it was the largest employer, but the turnover was about 90 percent a year, mostly because of injuries.

**Ms. BERKOWITZ**. That's right.

**Ms. SLAUGHTER**. And everybody, practically, that lived in the town somehow was scarred, hurt, damaged, from working in that plant. And it did lead, I think, the Reagan administration to levy the largest fine they had ever done against an industry in this country, which, I think, later was sort of negotiated down. But I'm glad to hear you say that lots of changes have been made. It would be tragic if we turned the clock back on that.

The human capital in an industry is extraordinarily important, despite the fact that I think it's being denigrated more and more. But the idea of leaving someone in their thirties, for the rest of their lives, to be impaired, unable to get other work, nobody should be allowed to do that to another human being.

So I'm happy to hear you say that IBP has since then become a model; is that correct?

Ms. BERKOWITZ. Well, I have to say that, in many ways, I owe it all to you and the committee hearing that IBP was brought in, because, after that hearing, OSHA did go into the plant and fine them \$5 million. I think what was most notable about IBP's response is, they didn't contest it; they didn't drag it up through the courts; they just stopped.

And, yes, I mean, it has become a model, in terms of ergonomics and health and safety. And you are all welcome, I'm sure, to go in the plant, because it has done such great things.

Ms. SLAUGHTER. Another thing I recall in some of those hearings is, there was always the trouble of people keeping double books on injuries. And I hope that that also has stopped. But there were some really pretty terrible things happening. It was almost 19th century conditions under which people were working.

I think that, when we talk about repetitive damage, people think that this is new, and I think that they really need to understand that the people who had worked in that particular industry probably are lame for life there. But I was really surprised at the 770-percent increase in this last decade. Do you think those are actual increases in hurts, or are they better reporting?

Ms. BERKOWITZ. I think it's a little better reporting. After all, what they discovered in 1987 was, President Reagan had put in a policy that if your injury and illness rate was below a certain number, you didn't get inspected by OSHA. So companies started lying on their records.

Ms. SLAUGHTER. Right. That's why they had the double books.

Ms. BERKOWITZ. Right, and keeping two sets, a real book and not a real book. So what happened is, injury and illness rates started going down in the country. Then they slammed a couple of companies for keeping real books and books they showed OSHA, and the companies started reporting more accurately.

At the same time, the Government started going after cumulative trauma disorders. But in meatpacking, the increase is very real. You see, in the 1970's, packinghouses were very different; they looked different than what they look today.

Today there are massive assembly lines where a worker does the same exact cut 10,000 to 20,000 times a day on meat that is often frozen and hard. They no longer have the right to sharpen their own knife. They are rarely trained. As you said, turnover in these plants is incredibly high, because it's tough, hard work, and people get hurt and they have to leave. Because, you know, it's an employment at will, if you're not in a union plant, and they can fire you.

So it's because of these changes in the industry that you see this increase in cumulative trauma disorders. The thing is, industry can prevent them. On some jobs they have automated them. We haven't lost one worker, but they have been automated. On other jobs, they have lowered conveyor belts. On other jobs, they have re-designed knife handles. On other jobs, they have built mechanical assists to help workers actually make the cuts that they are doing.

So there are ways, given this sort of type of industry, that you can prevent these disorders.

Ms. SLAUGHTER. Thank you very much.

Mr. Treaster, I understand that you mentioned one of my favorite companies, Xerox, which is my district, up in Rochester, NY, as an example of what they have done with quality circles and working with ergonomics. We are hearing a lot from some of my colleagues now that that team concept is not allowed under the NLRB, and looking for a law change.

Do you have any specific cases that you have encountered where you were able to convince management of the need for these circles and your experience of how well they have worked?

Mr. TREASTER. Yes, as a matter of fact, I took a trip to Xerox when I first started getting involved with the union. It was like the high point of union activity and company and employees working together. And me being the person I am—I'm pretty nosy—I talked to a lot of employees off the guided tour they give you. I tried to pull people aside, and they said they actually had a right to pull engineers in, redesign their own production lines, buy ergonomic equipment that suited them, adjust and raise tables.

I went back to my company and said—you know, we have different platforms—I said, "Let's let these people do that with their platforms. Let's bring them in and let them decide how we're going to run it, how the machines are going to be set up," and we've done that pretty well. With every new platform, before the tools are even made anymore, we take people that are going to run that platform and help design it ergonomically, so the machine fits the person, and the person doesn't fit the machine.

Ms. SLAUGHTER. And you've found that that means the person works better, is more productive, happier. It's obvious to me that, if they have a say in their work—and I heard the same thing from Bausch and Lomb, which is also in my district, that they realized people who had been making sunglasses for 25 years knew something about it, and that they have also engaged in the team concept.

But, in general, what does this do for the work force? Would you say it makes it more stable, or does it make any difference?

Mr. TREASTER. Well, first off, if you're healthy, you're usually happy. And keeping people from being hurt is the first step in being happy and actually having a say in what happens to them. Anytime a person has a say in what they do—and just like I do today, it's a small say, but it's a say—you feel like, you know, at least you're getting your fair chance. I think that's just what most of the average workers are asking for, and it has helped my plant.

Ms. SLAUGHTER. Thank you very much.

Mr. MCINTOSH. Thank you very much, Ms. Slaughter. I don't know if you meant to imply this or not, but I hope you will join us on the team act, if we make that legal change.

Ms. SLAUGHTER. Well, actually, Mr. McIntosh, it's my understanding there is nothing whatever that prohibits companies from having circles. And Bausch and Lomb, as I mentioned, is nonunion, and they have done it for years. So we've got plenty of legislation we've got to do here. I don't see any point in doing something that's useless—although we do that.

Mr. MCINTOSH. Try not to.

Ms. SLAUGHTER. I just don't like it.



**Mr. MCINTOSH.** There was a case in Indiana where a nonunion facility was accused of using the team approach to thwart the unionization of a plant, and that has everyone nervous that they will be challenged if they do that, which is why we were trying to go forward with legislation. Again, a subject for a different hearing and a different committee.

Thank you all for coming. I appreciate it.

Oh, Mr. Gutknecht, excuse me. I didn't see you come in. Do you have any questions for our witnesses?

**Mr. GUTKNECHT.** Well, Mr. Chairman, I just had one followup to Ms. Berkowitz.

You alluded to the fact that there are packing plants that have people making exactly the same cuts for 8 hours. Do you have any specific examples of that? I mean, I've toured two in my district, and they rotate people every 20 minutes.

**Ms. BERKOWITZ.** Meatpacking or poultry?

**Mr. GUTKNECHT.** Either one.

**Ms. BERKOWITZ.** I don't know any meatpacking plant that rotates every 20 minutes. There are none in our union that I know of. So, sure, where are you from?

**Mr. GUTKNECHT.** Minnesota.

**Ms. BERKOWITZ.** Come down to Monfort in Minnesota. They were just cited by OSHA, and they settled the case, and they are going to automate some jobs. And we asked them to put in a rotation program on a couple of jobs, and they are going to do that. Yes, in Worthington, MN, there's a nice Monfort packinghouse.

**Mr. GUTKNECHT.** OK. Thank you.

**Mr. MCINTOSH.** Thank you all. I would ask unanimous consent that the record be held open. If any of you have additional comments based on the testimony you heard today from other members or want to add to that—we also may have additional questions that would come from the committee.

**Ms. BERKOWITZ.** Mr. Chairman.

**Mr. MCINTOSH.** Yes.

**Ms. BERKOWITZ.** I was wondering if I could include this in the record. I just got it today. It's an article from Business Week for July 17 that says, "Are regs bleeding the economy? Maybe not. In fact, they sometimes boost competitiveness." And I thought it would help in this debate.

**Mr. MCINTOSH.** Sure. I have not seen that article. I would be delighted to take a look at it. And if there is no objection, we will include it in the committee's record.

Thank you very much. The committee will stand adjourned.

[Whereupon, at 2:55 p.m. the subcommittee was adjourned, subject to the call of the Chair.]







