Reprinted with permission from the *Proceedings of the Academy of Political Science*, Vol. 32, No. 3 (1977), pp. 106-20.

## Controlling Occupational Hazards

## FRANK GOLDSMITH

While the economic status of workers has fluctuated between apparent affluence and depression, job safety and health hazards have consistently taken their toll in the United States. Each year over 100,000 workers die as a result of workplace hazards. Over 14,000 of these deaths result from accidents and the remainder from exposure to toxic substances and chemicals that induce disease.

The Industrial Revolution brought with it many safety and health hazards. The twentieth century has had a "chemical revolution," which has added new products and increased industrial production. David Baltimore, who received a Nobel Prize in cancer research, and other United States and international experts claim that over 85 percent of all cancers are related to environmental and occupational causes. Thus the 350,000 Americans who die each year of cancer would have faced a different fate if workplaces and industrial plants had controlled their pollution.

About 2.3 million workers are either permanently or temporarily disabled each year by work accidents. This figure is only an estimate and could be much higher. A federally supported study conducted at the Department of Environmental Health, University of Washington, indicated that both employers' and workers' compensation logs, on which national estimates are based, are unreliable for determining workers' safety and health status. This study, which covered 600 workers from six plants in Seattle, Washington, found that over 30 percent of workers' illnesses were job-related and an additional 30 percent were influenced by workplace hazards. The employers' logs in the same plants listed only 3 percent of the workers' illnesses and the workers' compensation log only 2 percent.

The cost of job hazards has not been documented by government agencies. The National Safety Council has estimated that work accidents (not illnesses)

cost \$15.3 million in 1974 alone, with an additional \$3 billion in wages lost, \$1.7 billion in medical expenses, \$2.1 billion in insurance administration costs,

\$1.7 billion in fire losses, and \$6.8 billion in indirect costs.

If it were not for the legal powers of the Occupational Safety and Health Act (OSHA) of 1970, the study would not have been possible. The study director was unable to receive voluntary permission from the plant managers to have a medical doctor from the university examine employees from the plants. After informing the plant managers of the legal mandate of the OSHA, however, permission was given. The doctor hired by the university then administered

the physical examinations and health care questionnaires.

As section 2 of the OSHA indicates, Congress found that work-related illnesses and injuries "impose a substantial burden upon, and are a hindrance to, interstate commerce in terms of lost production, wage loss, medical expenses and disability compensation payments." The estimates of the total cost of the nation's job hazards, however, have not been put to a thorough cost accounting by the OSH Administration or by the National Institute for Occupational Safety and Health (NIOSH). Once again, the sources are private and partisan, such as industry economists. Since the premium rates paid to compensation insurance companies are based on industry's cost determinations, they are tapered to lower figures. The goal of the OSHA was to correct these inadequacies and inaccuracies in statistical documentation of the impact of job hazards. Additional cost factors involve unsafe and unhealthy working conditions. These are not based on hard data, but on the estimates derived through an extrapolation of various work-related factors. Cost figures are usually expressed in terms of the money that industry says it will cost to correct the workplace-not in terms of the cost of leaving the working conditions uncorrected, nor of the benefits gained by hazard correction.

Despite the "Chartbook on Occupational Injury and Illnesses" (Report 460), conducted by the OSH Administration in 1974 and released in 1976, the Bureau of Labor Statistics is still unable to produce a substantial data base on job-related illnesses. Job injuries are stressed throughout the report. The Labor Department still does not document hazards of chronic, long-term exposures. This is clearly stated in the chartbook: "For the third straight year, skin disease and disorders were the most prevalent of all the categories of job-related illnesses recorded. This may be due in part, to the ease of recognition of these cases and the speed with which symptoms appear after contact with an irritant." Thus the debate on which figures are correct continues, precluding the objective use of documenta-

tion by congressional committees at appropriations time.

The failure to accumulate an adequate data base presents an obstacle to medical and public health officials, professionals, practitioneers, health planners, and health care consumer advocates, who are trained to use a data base as the main source for determining program direction. The 1975 law (PL 93-641) establishing local Health Systems Agencies called on these agencies to assess the occupational and environmental dangers in factories in the planning areas. Prior to the OSHA, each state collected its own data base according to its own criteria. No national figures were possible, since there were no national programs or reporting requirements. Thus, reliance on industry filled the vacuum.

Absenteeism, unnecessary sick days, and other expressions of worker resistance to unpleasant work conditions are often referred to as "social costs." Pinning a figure on these worker "job actions" is one aim of those who try to point out the costs of working in an unsafe and unhealthy workplace. Another figure that must be calculated is "annoyance costs," the added wages that workers demand when they work under hazardous conditions. This figure was seen as significantly high by Nicholas Ashford, a professor at the Massachusetts Institute of Technology, in his study for the Environmental Protection Agency, "Some Considerations in Choosing an Occupational Exposure Regulation."

The necessity of calculating these social and annoyance costs, in addition to the other "harder" figures, stems from the insistence of executive branch officials through the Office of Management and Budget (OMB) on assessing the economic and inflationary impact of proposed federal job safety and health standards. Until the twentieth century, the prevailing theory concerning workplace accidents and, to some extent, job-related illnesses held that "acts of workers" were responsible for workplace hazards. The reason for blaming them was financial, for the employer was then free of liability. The impact of this type of reasoning was blunted to some extent with the passage of statesponsored workers' compensation laws. These established a "no fault" system for injury and illness at the workplace. Under these state laws-no federal law was established except for federal jurisdictions—the injured employee had to accept certain disability and compensation payments in return for not suing the employer. Workers and their unions did not support this legislation.

With the recent revelations concerning the recognition of long-term, latent, job-related illnesses, however, workers' compensation laws alone are not satisfactory. In order to gain some compensation for injury and illnesses beyond the low compensation and disability payments, workers are beginning to bring third-party suits against the manufacturers of machinery. For example, frustrated by the Labor Department's and the steel industry's lack of action to protect them from coke-oven emissions, coke-oven workers and their families have sued the makers of coke ovens who supply the steel companies.

The steel industry is among the most outspoken in its claims that the "acts of workers" are responsible for most job-related disabilities. The general attorney in charge of occupational safety and health for U.S. Steel, William L. White, has stated that "our figures for our steel operations over many years show that about 85% of all disabling injuries and illnesses are caused primarily by these unsafe actions, not by unsafe conditions." While most other industries have conceded that job-related illnesses (as opposed to accidents) may stem from working conditions, here too they usually hasten to add that workers'

life-styles, particularly their smoking and drinking, are the probable primary

causes, with working conditions only a contributing factor.

George Hagglund, director of OSHA programs for the University of Wisconsin's School for Workers, initiated a study of the university's Division of Safety and Buildings to test the theory that physical safety standards will not effectively reduce injury rates because most accidents result from improper human behavior. The results of the study, the first of its kind in recent history, determined that unsafe conditions were responsible for twice as many accidents as unsafe acts of workers. It found that between 54 and 58 percent of accidents were the result of unsafe conditions, while unsafe acts of workers were found in just 26 to 34 percent of the cases.

So-called black lung disease is a good example of a health problem for which responsibility has been shifted from the worker to his work environment. Before the 1960s, coal miners were continually turned down for workers' compensation for their breathing problems. State and local courts ruled in favor of the coal companies' claims that it was not the rock and coal dust but the miners' life-styles that caused their respiratory illnesses. In the 1960s this view changed as a result of efforts by the Black Lung Association and the Miners for Democracy with the cooperation of the growing, independent medical-scientific com-

munity.

Now, black lung benefits, under the Coal Mine Health and Safety Act of 1969 administrated by the Social Security Administration, are being awarded to coal miners who can prove that their disability is due to mining. Indeed, the reform leadership of the United Mineworkers of America is pressing for the automatic awarding of benefits if a coal miner works at least fifteen years in the mines, in light of the fact that X-rays and other methods of measuring lung damage are not fully accurate and a number of coal miners may not be able to prove that their disability exists.

Occupational safety and health have received a low priority in the United States from health professionals and administrators alike. Citing a study by Henry Howe, head of the American Medical Association's Occupational Medicine Division, Edward Dolinsky documented the low priority that occupational medicine has both in medical professions and in health care policy in general. He reported that "while between 10,000 and 20,000 physicians provide occupational health services [in industry] in the United States, only about 2,000 of these . . . were engaged in the full-time practice of occupational medicine."1

Dolinsky's report continued: "Since the establishment of occupational medicine as a field of specialization by the American Board of Preventive Medicine in 1955, only 60 persons have completed the formal residency programs, while

<sup>&</sup>lt;sup>1</sup> Edward Dolinsky, "Health Maintenance Organizations and Occupational Medicine," report (New York: Health Care Research for Metropolitan Life Insurance Company of New York, 1974).

350-400 people have taken the examinations of the board. The number of persons who have certificates in occupational medicine . . . is decreasing. All but 90 are employed by corporations and are unavailable for clinical consultation. Questionnaires sent to senior medical students during the past five years reveal little evidence of interest in this field of practice." (These figures were provided by the American Board of Preventive Medicine.) There are no medical schools in this country that give required courses in occupational medicine. Only a few offer electives in job-related illnesses. Medical doctors and public health professionals, given their lack of training in detecting job-related illnesses, cannot diagnose them and thus cannot suggest preventive measures to stop the hazards.

In contrast, according to Dr. Christoph Bruckner, chairperson of the Health Commission of the People's Assembly of the German Democratic Republic and also a professor of occupational medicine in Jena University, each medical student in the GDR is required to take sixty hours of occupational safety and health education. This training includes both job-related medical courses and administrative training in the duties and responsibilities of the Health Ministry in occupational safety and health matters. In addition, the four years of specialization include occupational medicine. These four years are spent gaining additional medical training, serving under a county health inspector, and working under the direction of a medical doctor in a factory polyclinic. (All factories with 4,000 or more workers have a dully equipped polyclinic.) Dr. Bruckner reported that occupational medicine is highly regarded in GDR medicine and there is no problem in filling the demand for more professionals in this field. Nicholas Ashford found a similar interest in occupational health and safety among professionals in the Western European countries.2

Prior to 1970 government protective programs in this country were assigned to state and local labor and health agencies. These agencies performed more as industrial hygientists and labor relations professionals than as medical and public health practitioneers interested in preventive medical practice to eliminate hazards. As a result, employers were given a free hand in the determination of working conditions. The only exceptions took place when workers organized unions to protect themselves.

One reason for the medical and public health professionals' lack of interest in workers' job-related health problems is that workers are medically documented as being the healthiest group of people in the country, and at work they generally are. Standard public health and medical school curriculums indicate this fact, with the result that students are steered away from these potential subjects and toward those more in need of health care, such as community residents, children, the disabled, and patients who present more "interesting" health problems.

<sup>2</sup> Nicholas Ashford, Crisis in the Workplace: Occupational Disease and Injury (Cambridge, Mass.: The MIT Press, 1976).

Neither is there a great deal of personal remuneration in the practice of occupational medicine, even if a medical doctor works for a company. A salaried position could rise, with other compensation, to \$75,000 or more a year. But in private practice, under fee-for-service incentives, doctors receive higher incomes than that. Also, the overwhelming majority of medical and public health professionals come from middle-to-upper-income family brackets with little knowledge of industrial or even white collar work.

Another reason for the health professionals' lack of interest in workers is the ideological framework in which these people have been viewed during the last twenty-five to thirty years. The thrust of this view is that the working class has somehow melded into the middle class. Workers are seen as owners of two cars who live in split-level homes with two garages in middle-class neighborhoods. This apparent prosperity has led health professionals and others to ignore workers' job-related health problems in their studies, grouping them along with other "at risk" groups.

However, this perspective is changing. Andrew Levison has exploded the myth of the affluent worker.3 His Working Class Majority showed that while workers have attained considerable gains since the Great Depression—including the right to organize into unions of their choosing, the passage of social security, and unemployment compensation—in the 1970s less than 20 percent are organized into unions. Unemployment in the 1970s has reached double-digit figures and, for black, Puerto Rican, and other minority youth, the rate is as high as 50 percent. Unemployment is now reaching workers with over twenty years' seniority in steel mills and automobile plants. The construction trades are particularly affected. Moreover, the national unemployment problem is now coupled with inflation. Thus, workers are definitely not well off.

Industrial hygienists and medical scientists in the employ of industry, labor, and government have been increasingly concerned about the health effects of workplace hazards. By contrast, the average busy medical practitioneer, including specialists in obstetrics-gynecology, urology, and pediatrics, have little if any knowledge of job-related health problems. This lack is most alarming in obstetrics and pediatrics as a large number of young women are entering the labor force in potentially hazardous jobs where transplacental toxic and cancercausing substances may have a direct effect on reproductive organs. Yet obstetricians and pediatricians are not aware of job-related hazards to male and female reproductive organs.

United States public health schools are not training occupational health professionals, either. In fact, environmental health departments in most public health schools pay scant attention to occupational safety and health. In the current budgetary crisis facing public health schools, environmental health departments themselves are facing severe cutbacks. Some schools of public health,

<sup>3</sup> Andrew Levison, The Working Class Majority (New York: Coward-McCann & Geoghegan, Inc., 1974).

such as those at Harvard University, the University of Illinois, and the Johns Hopkins University, are attempting to parlay "soft" government monies with negotiated labor and management agreements that provide for research dollars into financial support for their programs.

The development of medical and public health professional expertise has lagged even though the purpose and findings of the OSHA directly addressed the need to focus on occupational health issues. The act clearly emphasized medical research, documenting latent diseases, establishing medical criteria, and personnel training programs. The Labor Department, however, has failed to act on these mandates since the creation of the OSH Administration in 1970.

The National Institute for Occupational Safety and Health (NIOSH), under the OSHA, was entrusted with medical and scientific research into jobrelated diseases. NISOH has a low placement in the federal bureaucracy, being located within the Center for Disease Control, which is under the Public Health Service in the Department of Health, Education, and Welfare. Unlike almost every other country, the United States does not give this agency cabinet status. The combination of these administrative and policy problems with the severe underfunding of the agency means that NIOSH gets less than \$40 million annually. A career with NIOSH has not become a professional career goal for many medical doctors, scientists, or public health professionals. In addition, the Labor Department does not treat NIOSH with high professional respect. In fact, under the OSHA, the OSH Administration need not adopt the recommendations of NIOSH and often has disregarded them in favor of a particular company's argument.

Scientific research is blurred with the medical care program of an occupational health services program. The former is necessary to determine the relationship between a job-related hazard and an illness. This is a necessary first step as mandated by the OSHA, but it has taken practically all of the time and money of NIOSH programming, which could include the development of protocols for occupational health services for hospital clinics and emergency rooms.

Federal guidelines under the new health planning legislation (PL 93-641) provide for the incorporation of environmental health planning as a basic priority of regional planning. To be included in each regional planning system are "the promotion of activities for the prevention of disease, including studies of nutritional and environmental factors affecting health and the provision of preventive health care services." This provision was minimally incorporated under previous health planning attempts, such as the Comprehensive Health Planning Act (CHPA). In some environmental planning programs, as in Detroit, Los Angeles, and New York City, the issue of occupational health and safety has been incorporated to some extent. Environmental planners in these programs understood that incorporating for occupational safety and health was a first line of defense against factory pollution. Stopping the hazard at the work-place meant that it would not reach the outside environment.

Proper planning activity must include local and grass roots participation

and analysis. The first function of planning guidelines is to inventory all health facilities, including hospitals, neighborhood health and mental health centers, and free standing clinics. The main purpose of the inventory is to determine the extent to which occupational health services are offered, data on job-related illnesses are collected, and what other occupational health capabilities exist in the area. The second function is an inventory of all factories in the planning area. In accordance with the guidelines in PL 93-641, the regional Health Systems Agency (HSA) must list each factory by type of production, materials produced, safety and health hazards present, and number of workers with demographic descriptions that are essential for epidemiologic studies, such as race, age, and sex. The third function is the creation of an inventory of all medical and health related schools and educational programs to identify whether occupational safety and health courses are included in their curriculums.

These inventories would be summarized and analyzed on local and regional HSA levels to establish patterns of job-related illnesses and diseases, existing health resources, available occupational health service programs, and job safety and health educational opportunities. Involvement by health planning units would be valuable in the implementation of the mandate of the OSHA. It would also aid in the implementation of the HSA legislation. However, HSAs are dropping the environmental-occupational health committees they have inherited from their CHPA predecessors.

The above examples indicate that there has been considerable government intervention on a state and local basis to protect workers from hazardous working conditions. The United States does not have a constitutional provision, however, that protects workers at the workplace.

Workers' compensation has been the key 'legal protection against the consequences of job-related accidents and illnesses. In 1908, the first workers' compensation law was passed, but it covered only federal employees. These laws were not extended to all workers under the Interstate Commerce Act; rather, "states' rights" prevailed and each state set its own workers' compensation system. By 1921, after the Supreme Court upheld the establishment of state compensation laws, forty-six states had established these "no fault" liability laws. In 1976, about 85 percent of the nation's workers were reported covered in some manner.

The lack of uniformity in state compensation laws contributed to a company argument: "If we have to spend money to correct the workplace, this will make us uncompetitive with other companies which operate in states with weaker laws. In those states, the companies do not make changes and, even if workers seek and get workers' compensation for their injuries, the rates are one-third to one-half of those in the stronger states, thus making their compensation premiums less. They can then undersell us or sell at the same price and make more money. They can then invest in newer equipment and newer methods of production."

This argument, while rather ruthless, does have a kind of truth to it. Its logic was partially responsible for the mass exit of industry from the highly industrialized and labor-organized areas of the Northeast to the South and the Midwest. The turning back of federal occupational safety and health responsibilities to state agencies can lead only to that same breakdown. In fact, it did occur frequently prior to the passage of the OSHA in 1970.

There is an ongoing effort to establish a federal workers' compensation system with one national rate schedule and one set of medical criteria for all state programs. This was mandated by the OSHA (section 27), but according to the administration's staff director, while there was a willingness to create such a national rate program for workplace accidents, little consideration was given to job-related illnesses. Rather than establishing a federal compensation system, however, the commission is merely recommending standards by which state compensation programs would be judged. State workers' compensation programs would remain intact.

Federal involvement has not been very effective in guarding the lives and health of federal employees. A report to the Congress by the General Accounting Office (GAO), "Inequalities in the Preventive Health Services Offered to Federal Employees," indicated that the kind of health rights federal employees have is impressive, especially in comparison to other workers with or without union contracts. But these federal health rights are often taken away by local administrators who are not required to deliver services if they determine that there is not enough money available. In fact, the pattern of inequities among work sites seems to pervade the enforcement of PL 79-658, which was designed to give preventive medical services to federal employees. The GAO reported: "Depending on location, an employee can receive either a complete physical examination, a limited number of screening tests, or no preventive health services at all. Federal agencies believe that preventive health services are beneficial but that it is not always economically feasible to eliminate all inequalities in the provision of services." The GAO report did not assess whether this economic decision to deny health services was based on a comparison of the cost of preventive services with the cost of medical expenses that were not detected early. Thus, a right given at the federal level can be taken away by local administrators on the basis of "economic feasibility." According to the GAO report, "some local officials doubted the benefit of preventive health services in occupational settings. . . . Some believed preventive services were valuable but had not established them because of other priorities." The report continued, "For instance, the Long Beach Naval Shipyard, with 8,100 employees-6,500 industrial workers and 1,600 office workers—required yearly physical examinations for about 60% of the industrial workers. The naval industrial hygiene inspector determined that their jobs exposed them to some hazards or imposed certain physical requirements. Officials said that, although preventive services for the shipyard's 1,600 office workers were desirable, such services had not been provided because the medical unit was experiencing difficulties in meeting its existing workload."

The long and continuing debate over the establishment of medical criteria had to be addressed directly with the passage of the OSHA in 1970. Prior to that, medical and safety criteria were usually prepared by industry sources, since organized workers and their unions did not have the capability to do so. Federal attempts usually withered, owing to the lack of a legislative mandate and a financial commitment. Medical and public health schools that did jobrelated research were held suspect because their research was usually sponsored

The National Safety Council, the American Conference of Governmental Industrial Hygientists (ACGIH), and the American National Standards Institute (ANSI) all have attempted to establish a rational and objective approach to setting standards for job-related hazards. They review the existing literature on a particular substance and hazard, often taken from industry sources, and then establish a consensus or middle ground based on the findings. There has been little if any involvement by those most affected—the workers and their unions

—in these proceedings.

The passage of the OSHA in 1970 completely changed this. A top priority of the act was to establish federal safety and health standards, not on a consensus basis but on a scientific basis, using NIOSH and other reliable scientific sources. The first step in 1970 was taken by the assistant secretary of the OSH Administration, which adopted all of the consensus standards previously used by ACGIH and ANSI, pending review by industry, labor, and medical-scientific resources. Most, if not all, of these standards have been challenged and are under review. The vinyl chloride exposure level is an example of how out of line these old consensus standards could be. The ACGIH first established a vinyl chloride standard in 1967 at 500 parts per million (PPM), but later reduced it to 300 PPM. The Labor Department chose to adopt the 500 PPM level in 1970 as its standard. However, after the discovery of cancer among vinyl chloride production workers in B. F. Goodrich's plant in Louisville, Kentucky, the OSH Administration held an emergency standard setting procedure and within eighteen months lowered the exposure level to 1 PPM.

The vinyl chloride hearings, and those on asbestos, showed that modern research advances have made possible the identification of workplace hazards, enabled scientists to determine hazardous levels, and enabled engineers to de-

velop machinery that can correct the conditions to make workplaces safer.

## The Occupational Safety and Health Act

The OSHA was passed to protect all workers whose employers are engaged in interstate commerce. The main responsibilities for its administration lie within the Labor Department's OSH Administration.

The OSHA carries a full range of duties and responsibilities covering the establishment of federal safety and health standards, inspections (there are about 700 federal inspectors for the nation's 4.1 million covered workplaces), citations and penalties under a "right of entry" provision that is new to job safety and health legislation, and an emphasis on occupational health factors in occupational safety and health programs. The act focused on a key complaint directed at previous state legislation, namely, the area of voluntary compliance under which state inspectors exhorted employers to correct their workplaces

without the use of financial penalties or threat of imprisonment.

Another major element of the act was the provision in section 2(10) of an enforcement program that would "include a prohibition against giving advance notice of any inspection and sanctions for any individual violating this prohibition." The requirement of an advance notice to employers had been one of the major drawbacks of pre-1970 state occupational safety and health programs. Under the federal law, any worker or organized group of workers can now file a complaint with the OSH Administration regional office (or area office), and an inspector must appear at the plant gate, without informing the employer. The inspection is then carried out with the worker who filed the complaint or the representative of the worker, the plant management, and the labor department inspector. Because of the low number of inspectors, however, responses to complaints are not as fast as the framers of the act intended.

Twenty-two states have taken advantage of a major loophole in the OSHA, in section 18, which permits individual states to pass legislation that is "as effective as" the federal act, which can, after a three-year trial period, supersede their occupational safety and health responsibilities on the federal level. This provision, worked into the legislation through the conference bill between the House and the Senate, never had the backing of organized labor or those who

had experienced the effects of previous state programs.

To workers and organized labor, this provision has presented the problem of monitoring as many as twenty-three pieces of legislation. Large unions, such as the United Steelworkers of America, autoworkers, chemical unions, and construction unions, now have to keep track of twenty-two state plans and the federal program. The federal monitoring of state plans must take place in the Labor Department's OSH Administration. But, because of the leanings of the executive branch since the passage of the OSHA (the president appoints its top administrators), monitoring of these state plans has not matched the pressure for their enactment. Thus the same patchwork quilt of nonuniform statistics is being perpetuated.

The OSH Administration has not conducted an exhaustive study of its own to determine the effectiveness of these state plans. Questions remain: Are the state safety and health standards as effective as federal standards? Do states have the same rigorous criteria as the federal government, or are they awarding vari-

ances as they did prior to the 1970 law?

On the key issue of voluntary compliance, the North Carolina Public Interest Research Group, a Nader organization, found that the governor of North Carolina and his commission of safety and health affairs have been lenient with J. P. Stevens and Company, Cannon Mills, and other large companies in enforcing

safety and health laws. Using voluntary compliance as its primary enforcement method, North Carolina, according to this report, is not protecting its workers

and is using the section 18 loophole to evade its responsibilities.

Another consideration is that corporations operate across state lines and can therefore manipulate, on an internal corporate basis, the production of goods to encourage the establishment of state plans. At present, however, the establishment of major conglomerates that operate with virtual regulatory impuni-

ty has made federal enforcement a necessity.

The New York State AFL-CIO's position on whether New York should enact a state plan indicates a logical middle-ground position. It has stated its "firm and unequivocal opposition to any state plan or any state enabling legislation which does not contain specific worker protections afforded by the federal OSHA, does not have enforcement provisions equal to that contained in the federal statute, does not provide for immediate coverage and adequate enforcement of programs for all public employees on the same basis as for employees in the private sector ... and does not provide for adequate appropriations together with adequate skilled staff under civil service." It has recommended the termination of "any further New York State participation in standards and enforcement of the OSHA by withdrawing the state developmental plan." But it has supported a potential role for the states, by asking Congress to "provide for federal assistance to those parts of approved state plans dealing with areas that could remain under state jurisdiction, such as manpower training, education . . . and research."

The nailing down of enforcement and other key parts of the bill as a federal function stems from the poor experience with state inspectors who were often charged with corruption in regard to company payoffs. The charge, and the possibility of its being true, is indicated in other documented corrections of state government and state courts. It is far more difficult to offer payoffs on the federal level, where federal courts have jurisdiction and federal inspectors carry federal policing powers. As pointed out earlier, local and regional Health Systems Agencies could also complement a federal OSH Administration program to keep those with federal responsibilities informed of local issues and

problems.

The OSHA has brought a new set of positive, democratic conditions into the determination of new federal medical and safety standards and the subsequent elimination of old, inadequate ones. Some of these conditions are as follows: First, the federal government must have access to private property without the use of a search warrant. Such inspections can be initiated by an individual worker, a trade union, or the Labor Department itself. Second, workers and their unions must play an active part in the establishment of "criteria documents" prepared by the National Institute for Occupational Safety and Health. Every research study conducted by NIOSH, whether on its own premises or under a subcontract to private research groups, including company laboratories, must make available advisory space to workers and their unions most affected by

the hazard under analysis. These advisory committees, which have no veto power, do have complete access to all information on the hazards. Militating against this right is the lack of mandatory use of NIOSH documentation and recommendations by the OSH Administration in its standard setting process.

Third, workers and their unions must also serve on the Labor Department advisory committees, starting with the National Advisory Committee on Occupational Safety and Health (NACOSH) to special ad hoc committees established by the assistant secretary. This provides workers and their unions with the disclosure of the OSH Administration's administrative procedures and rulings that have had to be sought through other sources, as well as an opportunity to advise in their making. This, coupled with new "sunshine laws" and "freedom of information laws," enhances a further potential for an open government. Militating against these advisory committees are the infrequent meeting of the NACOSH and the willingness of the assistant secretary to bypass recommendations of the special ad hoc committees, such as the Coke Oven Advisory Committee. This committee had tripartite representation and recommended rather stringent standards for cancer-causing coke oven emissions, but the assistant secretary at that time, John Stender, chose to promulgate a proposed standard based on the "minority report" filed by the steel representatives on the committee.

A major problem facing the OSH Administration in the implementation of the OSHA is that, since its passage, there have been three secretaries of labor and an equal number of assistant secretaries in charge of the administration. There have been two directors of NIOSH.

In reaction to the advances—especially those in the standard-setting process-achieved under the federal OSHA, partly as a result of the democratic participation of those most affected by the hazard, the president issued Executive Order 11821, which requires the Labor Department to develop economic (and later inflationary) impact statements on its proposed standards. These statements are not developed with the participation of workers and their unions, and although hearings are held on each of them, testimony at that juncture has not been effective in representing the best interests of those affected by the hazard.

The Oil, Chemical and Atomic Workers International Union and the AFL-CIO have gone to court to have these executives orders declared illegal on the basis that economic feasibility is not a criterion of standard-setting under the OSHA. While economic feasibility was an issue raised by companies during the hearings on asbestos and vinyl chloride, those arguments were not considered relevant. The OSHA did not say that all working men and women would be protected "except when the company could not afford it."

The Labor Department did promulgate three federal standards for worker exposures relating to asbestos, vinyl chloride, and a group of fourteen cancercausing chemicals prior to the issuance of Executive Order 11821. The standardsetting procedures were put to the test with success in each case. The net effect was to invalidate industry's assertion that chemicals as causes of workers' illnesses are secondary to workers' life-styles, which include smoking and drinking. It

was also established that the technical ability to correct workplace hazards does exist. Workers and their unions actively participated in these proceedings and began to develop their own capability in occupational safety and health work. In addition, a new independent scientific medical community surfaced that, working with NIOSH, established medical and scientific proofs that are considered authoritative, reliable, and valid by labor and management alike. International sources of research were used extensively, particularly in the vinyl chloride hearings.

The Society of the Plastics Industry, using an A. D. Little, Inc., study that it financed, pointed out that 1.6 million workers would lose their jobs if a rigorous vinyl chloride standard were adopted. Such prognoses of doom were later condemned by the Wall Street Journal, which said that kind of "wolf crying" was invalid since most vinyl chloride and polyvinyl chloride producers are now complying with the 1 PPM standard. Makers of asbestos also claimed that

a stringent standard would wreck their insulation business.

Two key standards, those regulating noise and coke oven emissions, are being contested with support from the economic and inflationary impacts drawn up by the Labor Department under subcontracts on the basis of financial arguments. In both cases the economic estimates projected were astronomical. The hearing processes for both of these standards have been disrupted and left in a state of anarchy. Workers are in danger of having their present working conditions perpetuated by law if the Labor Department strongly considers the economic arguments of industry.

The legalizing of the present standard of noise exposure would undoubtedly result in loss of hearing by many workers. A complicating factor in this particular hazard is that the federal Environmental Protection Agency, which, incidentally, has its own federal, state, and local apparatus, also claims jurisdiction over the noise standard under the Noise Control Act. It has recommended an 85 decibel level, while the Labor Department is still proposing a 90 decibel standard.

Coke oven emissions, under the proposed standard, will continue to cause cancer in coke plant workers. This situation has a racist edge, since a disproportionate number of black and other minority workers are being hired in coke oven plants and remain there throughout their working lives because of archaic department seniority rules. It has been known for over 200 years that these emissions cause cancer.

A new White House group, the Council on Wage and Price Stability (COWPS), has further disrupted the OSHA standard-setting process. COWPS economists do studies on the economic feasibility of a standard in the economic and inflationary impact statements, each one costing in excess of \$100,000. These economists know little or nothing about occupational safety and health and merely apply economic, marketplace equations to support their assertions. Nicholas Ashford, in Crisis in the Workplace, points out that the attempt to use marketplace formulations in the workplace is invalid and unreliable.

## Conclusion

There is no question that, on balance, the intervention of the federal government and, to some extent, the state and local governments on behalf of workers has had a positive effect on protective legislation against workplace hazards. Although a federal program can ensure continuation of that progress, the evidence indicates that the habit of rendering these responsibilities to states would be a major step backwards.

No authoritative study has been conducted to determine whether the workplace has become safer and healthier. Certainly workers and their unions are more aware of job-related hazards. Their participation in the setting of standards and the inspection process is an important democratic advancement at the workplace.

The National Safety Council claims that deaths due to accidents at the workplace were reduced from 14,000 in 1975 to 13,000 in 1976; however, these figures were submitted by industry and have not been audited. On the negative side, basic industry is not putting more money into its safety and health programs. According to the first three surveys of nineteen industries, published each year by McGraw-Hill, companies were investing less money with each succeeding year through 1975, but in the 1976 survey the figures increased slightly over the preceding year. The investment is still very small, with approximately 3 percent of corporate investment monies going into safety and health programs. In this last survey, however, basic industry indicated a lower investment.

This does not auger well for employees and is one indication of the ineffectiveness of the OSHA in forcing employers to correct working conditions. It is still cheaper for companies to pay OSH Administration fines (the average fine for the first three years was about \$50 per citation) and pay more for increased workers' compensation premiums, although this has not been adequately proven, than to invest in new machinery or even in personal protective equip-

An encouraging note is that medical and public health professionals, administrators, technicians, and organized health consumers are beginning to understand the field of job-related illnesses and disease, though primarily on an individual basis. Their awareness has not influenced the medical and public health establishment. State and local health departments have little or no interest in OSHA programs.

One important step would be to incorporate occupational safety and health programs into national health legislative proposals now being considered in Congress. Only the Committee for National Health Service Bill has done so, and its proposal could serve as a model to others. Such legislation would not rid future administrators of the OSH Administration of the menace of executive orders and of economic impact statements, but it would bring into the arena the employers who end up with broken and mutilated bodies of workers from hazardous workplaces.