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August 1990

OCCUPATIONAL SAFETY & HEALTH

Options for Improving Safety and Health in the Workplace

RELEASED

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The Honorable Joseph Gaydos
Chairman, Subcommittee on Health
and Safety
Committee on Education and Labor
House of Representatives

The Honorable Paul Henry
Ranking Minority Member
Subcommittee on Health and Safety
Committee on Education and Labor
House of Representatives

Fatality rates today reflect a safer workplace than when the Occupational Safety and Health Act was passed in 1970. However, on average, at least 13 U.S. workers die each working day from injuries in the workplace, and about another 11,000 are injured seriously enough to lose work time or to experience restricted work activity. Work-related illness is also a substantial problem.

You asked GAO to identify alternative policies or procedures that might better accomplish the act's goal of providing a workplace that is free from safety and health hazards. This report identifies and analyzes options that the Congress and the Occupational Safety and Health Administration (OSHA) could consider for improving the workplace.

To respond to your request, we examined OSHA's current regulatory strategy. We compared OSHA's approach with that of state-operated safety and health programs, as well as the Labor Department's Mine Safety and Health Administration, which protects the nation's miners; we surveyed OSHA inspectors to obtain their views on OSHA's programs. We also interviewed federal and state agency officials, as well as safety and health experts from labor, management, and academia. Finally, we extensively reviewed the published literature on this topic.

OSHA's Regulatory Strategy

OSHA's regulatory strategy emphasizes inspecting worksites for compliance with safety and health standards. In fiscal year 1989, OSHA spent about three-quarters of its $248 million appropriation on standard setting and federal and state enforcement activities.[1] OSHA also encourages

[1]OSHA funds up to half the cost of 21 state-operated safety and health programs that it approves and monitors.

employers and workers to improve workplace safety and health conditions and provides education and training to help them do so. For example, inspectors educate employers and workers while doing inspections, and some OSHA standards require employers to provide training to workers.

Problems Identified

We identified the following problems with improving safety and health in the workplace, given the current legislation, resources, and OSHA strategy:

- OSHA has about 800 inspectors (plus 300 supervisors and trainees) to enforce safety and health standards for almost 3.6 million employers with about 55 million workers.[2] Therefore, even employers in high-hazard, targeted industries are rarely inspected.
- Civil and criminal sanctions used by OSHA provide limited deterrence to employer noncompliance. For example, in fiscal year 1988, the average assessed penalty for a serious violation was $261.
- Some employers have little incentive to "abate" (eliminate) promptly the hazards OSHA inspectors identify. Employers can delay abatement (1) while OSHA obtains a court order to get imminent dangers corrected or (2) by contesting an OSHA citation. In addition, OSHA usually does few follow-up inspections to determine if employers have complied with their agreements to abate hazards. Instead, OSHA relies on employers' verification of abatement, without requiring any evidence that it has taken place.
- Safety and health standards fail to cover existing workplace hazards or keep pace with new ones. For example, estimates of the number of new chemical products manufacturers annually introduce into the workplace range from 1,000 to 3,000—far more than OSHA can regulate with its current approach to standard setting.
- Many employers and workers lack information about workplace hazards. Workers are minimally involved in improving workplace safety and health, and employers often limit their efforts to compliance with standards rather than active attempts to prevent hazards.

[2]State-operated programs have enforcement responsibility for an additional 2.3 million employers with about 34 million workers.

Options for Improvement

The options we identify in this report might, through either legislative or administrative changes, strengthen the enforcement of standards and the roles of employers and workers (see table 1). Each option has advantages and disadvantages, which we discuss, but we did not analyze the cost-effectiveness of the options. The major factors we considered in selecting options were (1) frequent identification by safety and health experts or in the literature and (2) the extent of evidence we were able to obtain about their feasibility. Using these factors, we excluded from discussion in this report several options we initially considered, including those primarily enhancing existing economic incentives, such as workers' compensation, tort liability, and taxes based on work-related injuries and illnesses.

The options to strengthen OSHA's enforcement strategy would do so by (1) enhancing standard setting, (2) increasing deterrence, and (3) improving hazard-abatement procedures.

Delays in standard setting might be reduced by legislative changes, such as allowing OSHA to use a streamlined rulemaking process to revise the start-up standards set when OSHA was first created. This could be done by using national consensus standards or established federal standards—as the act allowed for the start-up standards. Delays might also be reduced by requiring (1) manufacturers to test likely hazardous substances and (2) OSHA to respond to standard-setting recommendations from groups other than OSHA.

Deterrence might be enhanced by increasing the probability of inspection of hazardous worksites and imposing stricter penalties for violations. Increasing this probability might be accomplished by (1) obtaining better information to target inspections and (2) reducing the amount of time inspectors spend on inspections of less hazardous worksites. Stricter penalties could come from higher civil penalties, expansion and use of criminal sanctions, or loss of the right to participate in federal contract competition.

Abatement options would require employers to (1) abate the identified hazards more quickly—both in imminent danger situations and when employers are contesting the citation—and (2) give OSHA evidence that employers have complied with their agreements to abate hazards.

Options to strengthen the involvement of employers and workers in improving working conditions include (1) strengthening OSHA's education and training efforts, (2) requiring worksite safety and health programs and committees, and (3) increasing worker participation in the inspection process, from the initial inspection through confirming abatement (see table 1).

Table 1: Legislative and Administrative Options Cited That Might Improve Protection of Worker Safety and Health

Option	Legislative	Administrative	Page
Strengthen enforcement			
Standard setting			
Establish an expedited standard-setting process	X		24
Give OSHA authority to require substance testing by manufacturers	X		26
Require OSHA to respond to standard-setting recommendations	X		27
Deterrence			
Obtain better data to target inspections		X	32
Inspect more of the hazardous worksites	X	X	34
Increase civil penalties paid	X	X	35
Expand and use criminal sanctions	X	X	37
Deny federal contracts to noncomplying employers	X	X	38
Hazard abatement			
Give inspectors shutdown authority for imminent dangers	X		40
Protect workers while employers are contesting citations	X		41
Require proof of hazard abatement		X	42
Strengthen roles of employers and workers			
Education and training			
Shift emphasis to programs that train more people		X	45
Employer and worker involvement			
Require safety and health programs		X	46
Require labor-management safety and health committees		X	48
Increase workers' participation in OSHA inspection process	X	X	50

Section 1 includes background material; section 2, an overview of OSHA's regulatory strategy; section 3, the options to strengthen enforcement; and section 4, the options to improve the roles of employers and workers.

Agency Comments

Labor said that GAO has suggested a number of interesting administrative and legislative solutions to the problems outlined in this report. Labor did not comment on the specific options identified, but noted that the administrative options will be seriously considered. Labor also suggested some clarifications concerning OSHA's (1) regulatory strategy, (2) efforts to increase the deterrent impact of its inspections, and (3) efforts to seek voluntary cooperation between employers and workers to improve workplace safety and health. We have made the necessary changes to reflect Labor's concerns. Labor's letter is shown in appendix IV.

As you requested, no further distribution of this report will be made for 14 days or until you release it. At that time, we will send copies to the Secretary of Labor and other interested parties. Should you have any questions or wish to discuss the information provided, please call me on (202) 275-1793. Other major contributors to this report are listed in appendix V.

Franklin Frazier

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Director, Education and
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Contents

Figures

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
BLS	Bureau of Labor Statistics
EPA	Environmental Protection Agency
LWDI	lost workday injury
MSDS	material safety data sheet
MSHA	Mine Safety and Health Administration
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
OSHRC	Occupational Safety and Health Review Commission

Introduction

Background

The Congress enacted the Occupational Safety and Health Act of 1970 on December 29, 1970, with the sweeping goal of "assuring so far as possible every working man and woman in the Nation safe and healthful working conditions." The act marked the first comprehensive, nationwide regulatory program to prevent workplace injuries and illnesses.

Earlier acts, both federal and state, had focused primarily on compensation to workers for workplace injuries. However, it had become apparent that workers' compensation, tort liability, and the tax system had failed to provide adequate incentives for employers to "abate" (eliminate) workplace hazards voluntarily. A 1970 Senate report ranked the problem of ensuring safe and healthful worksites for workers as of equal importance with any that engaged the national attention at that time.[1] In 1968, the Secretary of Labor testified that yearly, because of safety and health problems at the workplace, about 14,500 workers would be killed,[2] over 2 million disabled, and over 7 million injured. In 1970, he also testified that the number of disabling injuries per million hours worked was 20 percent higher in 1970 than in 1958.[3]

The act requires employers in the private sector to (1) furnish employment and a place of employment that are free from recognized hazards that cause or are likely to cause serious physical harm or death to workers and (2) comply with occupational safety and health standards. The act also requires each worker to comply with occupational safety and health standards, as well as all rules, regulations, and orders issued under the act that are applicable to the worker's own action and conduct.

As shown in figure 1.1, the act covers about 88.7 million workers and about 5.9 million employers. Only three groups were excluded from direct coverage: the self-employed, those employed by state and local governments,[4] and those covered under other federal safety and health laws. The last group now includes miners, as well as airline and nuclear facilities workers. Since 1976, an appropriations rider has exempted certain small farms with 10 or fewer workers. Each federal agency must

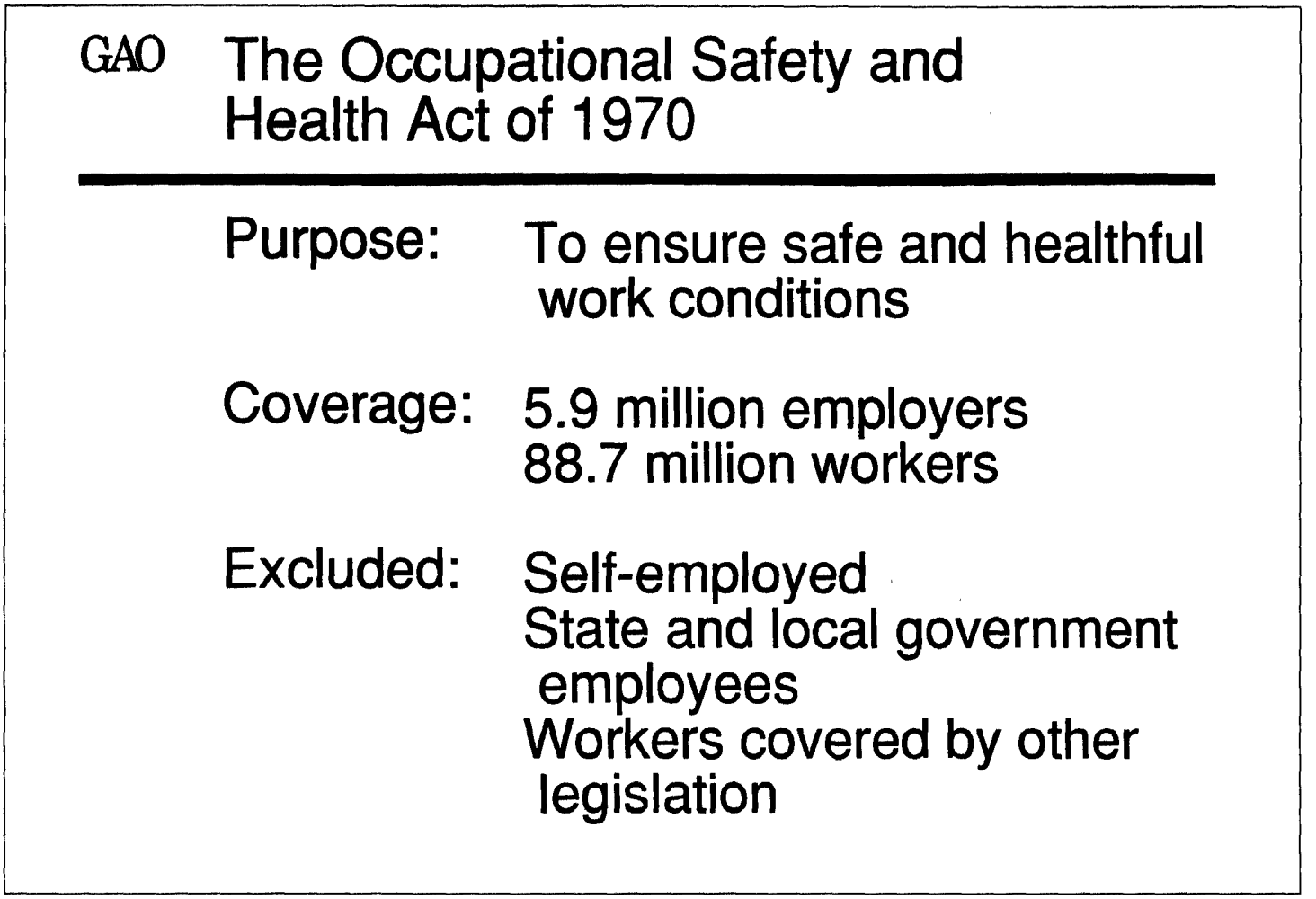
[1]S. Rept. 1282, 91st Cong., 2d Sess. (1970).

[2]Hearings on S.2864 before the Subcommittee on Labor, Senate Committee on Labor and Public Welfare, 90th Cong., 2d Sess. 69,71-73 (1968).

[3]S. Rept. 1282, 91st Cong., 2d Sess. (1970).

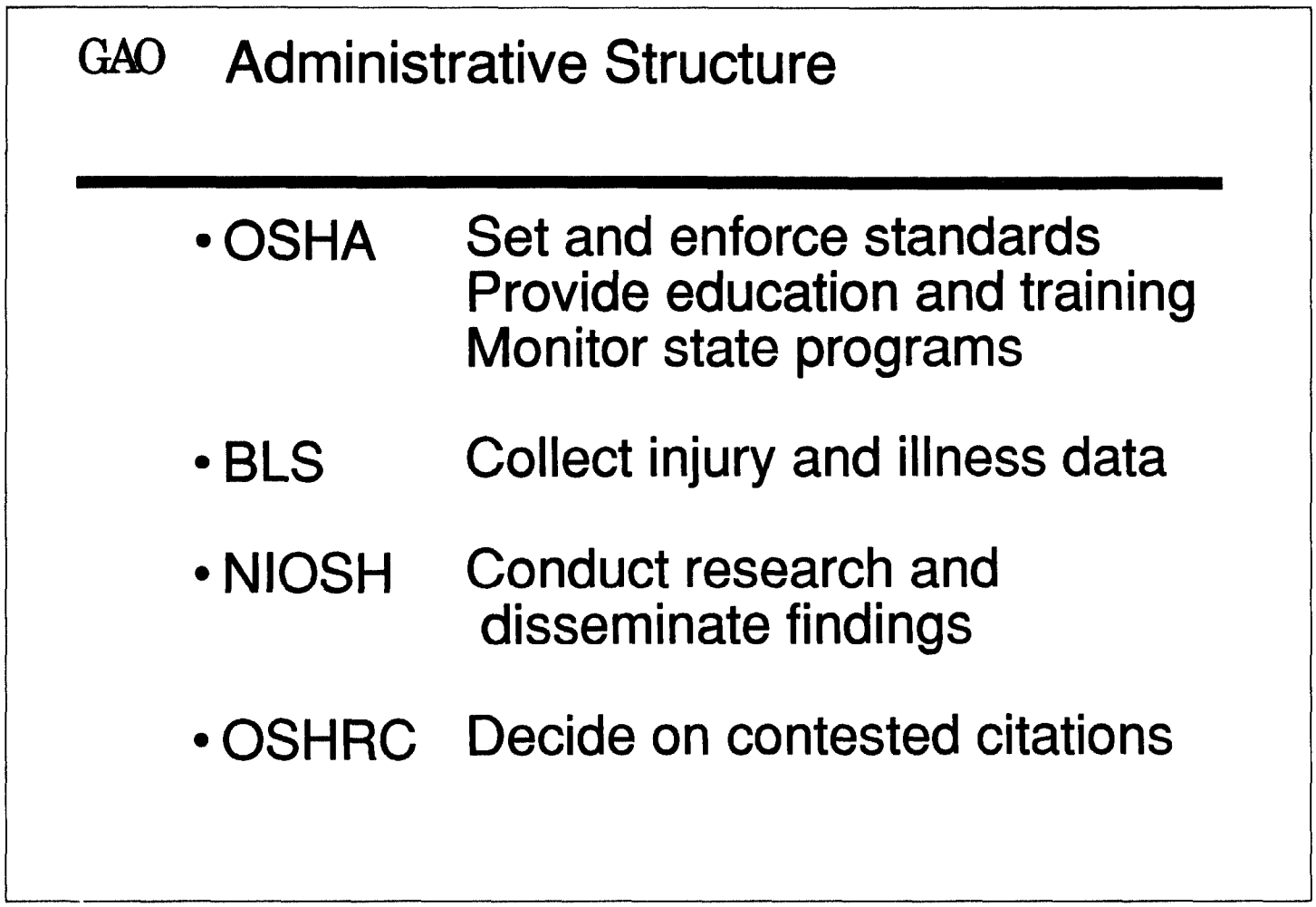
[4]State and local government employees are, in some states, covered by state-operated safety and health programs approved by OSHA.

Figure 1.1



establish and maintain an effective and comprehensive safety and health program for the protection of federal workers; the program must be consistent with OSHA standards for private sector employers.

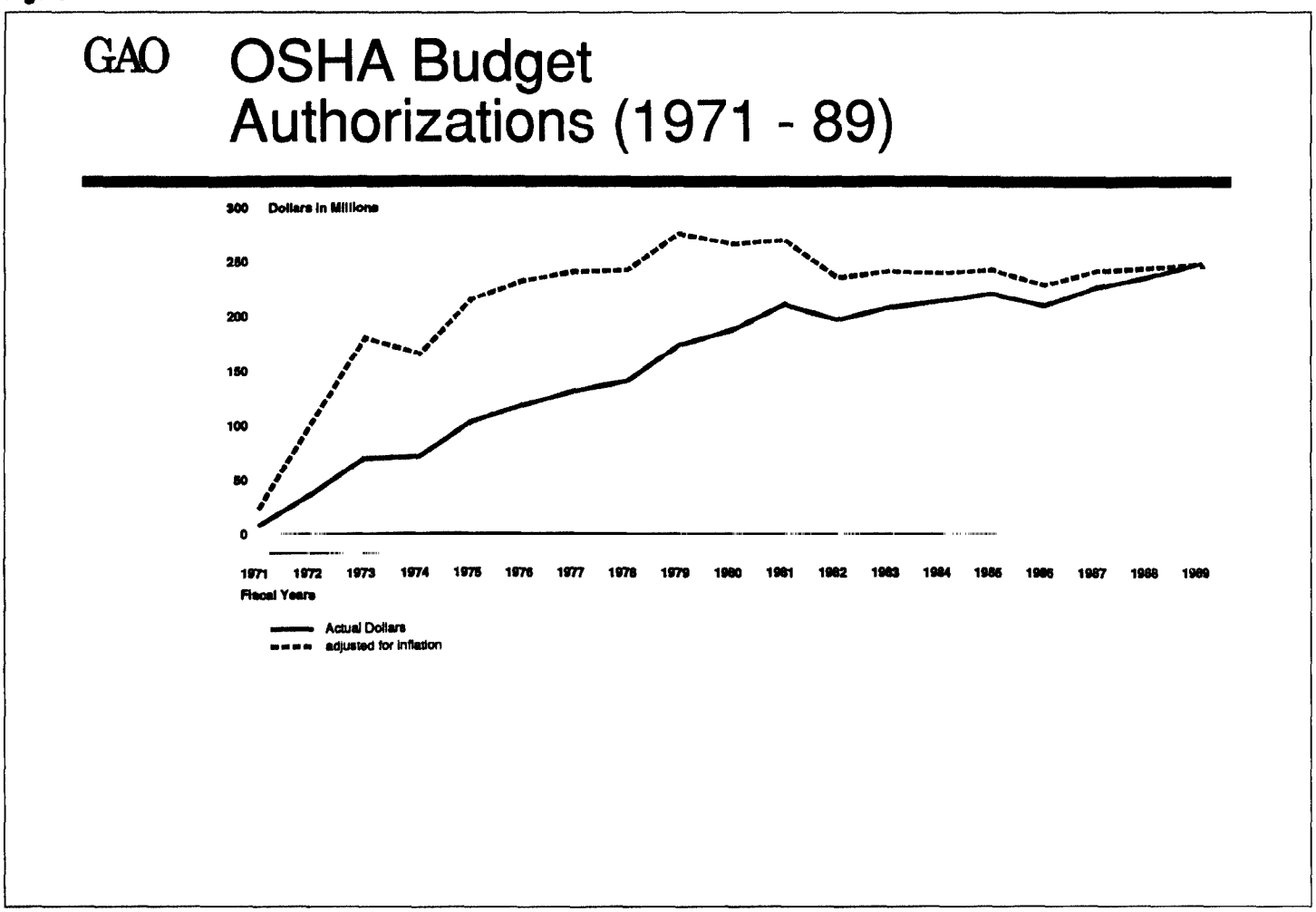
Figure 1.2



Administrative Structure

The act separated enforcement-related activities on occupational safety and health from research activities. The Department of Labor is to carry out enforcement activities through the Occupational Safety and Health Administration (OSHA) and the Bureau of Labor Statistics (BLS); the Department of Health and Human Services is to carry out research activities through the National Institute for Occupational Safety and Health (NIOSH). In addition, the act established the Occupational Safety and Health Review Commission (OSHRC). (See fig. 1.2.)

Figure 1.3



Note: Inflation adjustments used the GNP deflator for total federal expenditures on goods and services with 1989 as the base year. Thus inflation adjustment figures are in 1989 dollars.

Occupational Safety and Health Administration

The Secretary of Labor established OSHA to administer the act. OSHA sets mandatory safety and health standards; through its regional, area, and district offices, OSHA inspects private sector worksites, proposes penalties, and prescribes abatement dates for employers found violating the standards or failing to meet their "general duty" to provide a workplace that is free from safety and health hazards. In addition, OSHA provides education to workers, employers, and the public, mostly through grant activities.

The act authorizes the states to develop and operate their own safety and health programs; 21 states and 2 territories do so.[5] OSHA approves, monitors, and evaluates these state programs. It may fund up to 50 percent of the cost of operating these programs.

OSHA's budget authorization in actual and constant (inflation-adjusted) dollars for fiscal years 1971 through 1989 is shown in figure 1.3. In fiscal year 1989, OSHA's budget authorization was $248 million. Although OSHA's funding has increased since 1971, funding, adjusted for inflation, has remained steady since 1982, decreasing about 10 percent since its peak in 1979. Meanwhile, data provided to us by OSHA showed that the number of employers covered by OSHA increased over 30 percent between 1979 and 1989.

Bureau of Labor Statistics

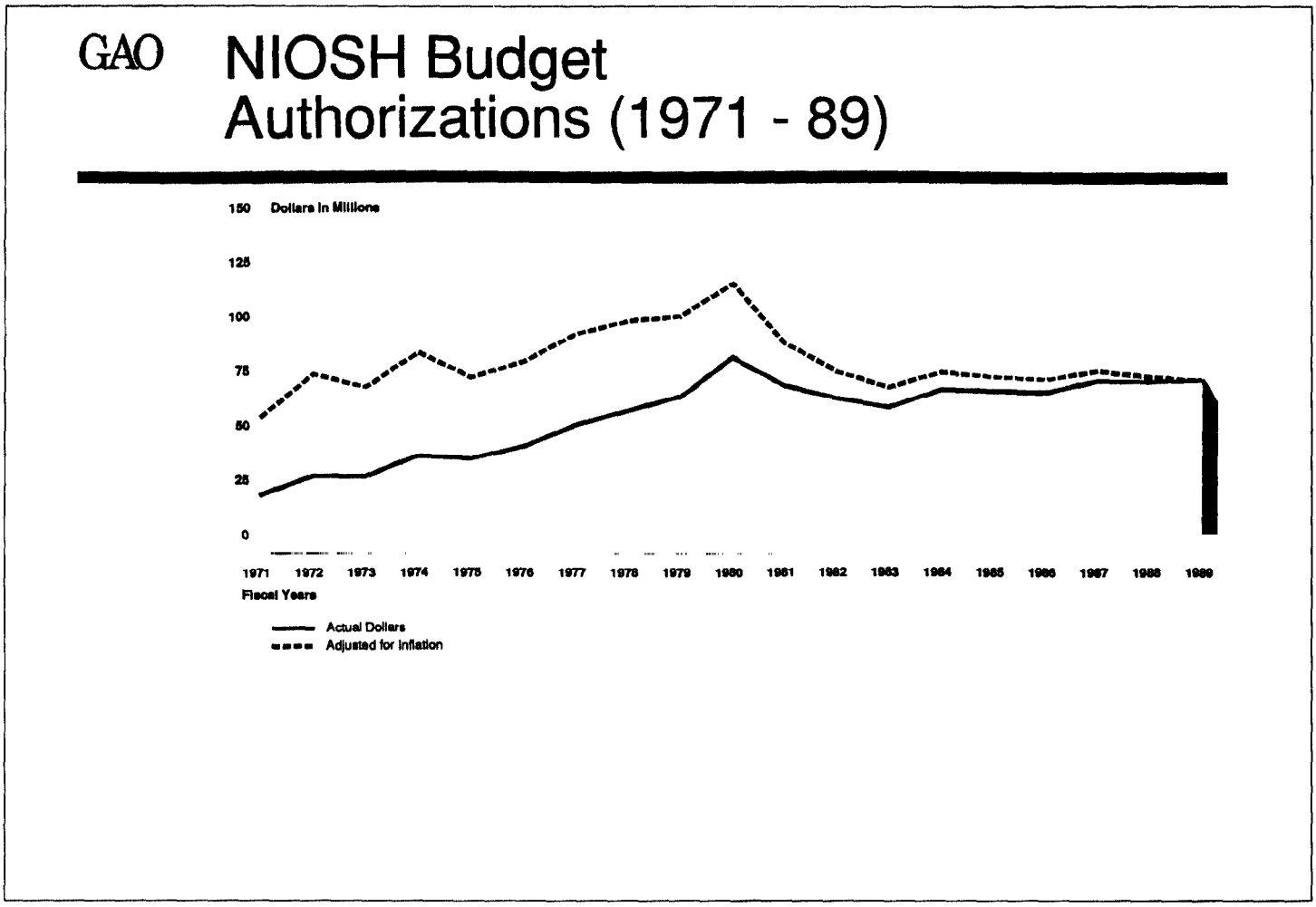
BLS is responsible for collecting occupational safety and health data. It issues guidelines to employers, defining what injuries and illnesses to record and what information to record about them. In addition, BLS (1) surveys some 280,000 employers annually to obtain occupational injury and illness data and (2) provides the statistical results to OSHA and others. For fiscal year 1989, about $20 million of OSHA's $248 million budget went to BLS.

National Institute for Occupational Safety and Health

The act created NIOSH within the Department of Health and Human Services. NIOSH is responsible for conducting research and analyzing the results so as to prevent illness and control hazards in the workplace. NIOSH's mandate includes four basic tasks: respond to requests for investigations of workplace hazards, conduct research on ways to control or prevent work-related health and safety problems, recommend to OSHA appropriate regulatory actions ("standards") based on scientific findings, and train occupational safety and health professionals to carry out the mandates of the act. NIOSH also does work for other agencies, including the Mine Safety and Health Administration (MSHA) and the Environmental Protection Agency (EPA).

[5]These programs are required to provide enforcement in the public sector (state and local government employees) as well as the private sector. Two additional state-operated programs provide enforcement coverage in the public sector only, with OSHA responsible for private sector enforcement.

Figure 1.4



Note: Inflation adjustments used the GNP deflator for total federal expenditures on goods and services with 1989 as the base year. Thus inflation adjustment figures are in 1989 dollars.

NIOSH's budget authorization in actual and constant dollars for fiscal years 1971 through 1989 is shown in figure 1.4. For 1987-89, NIOSH's budget authorization had been about $70 million annually. Like those of OSHA, NIOSH's budget authorizations adjusted for inflation have remained steady since 1982. However, the 38-percent decrease, since its peak year of funding in 1980, has been greater than OSHA's decrease. NIOSH's funding level is lower now, in real terms, than in 1972.

Occupational Safety and Health Review Commission

Employers may appeal a citation or proposed penalty to OSHRC, which has three members appointed by the President, with the advice and consent of the Senate, for staggered terms of 6 years. OSHRC employs administrative law judges to rule on contested cases. On the basis of evidence provided at hearings, the judges decide whether to affirm, "vacate" (annul), or modify OSHA's citation and proposed penalties. After the decision, any party can petition OSHRC to review the decision of the administrative law judges.

Legislation Has Not Been Substantially Amended

Except for a minor technical change, the act has not been amended. However, the Congress has enacted various appropriations riders, generally limiting the worksites at which OSHA could enforce the act's provisions. Six appropriations riders were in effect in fiscal year 1989. For example, OSHA cannot use appropriations to (1) apply the act's provisions to farms that have 10 or fewer workers and do not maintain a temporary labor camp or (2) schedule routine safety inspections of certain employers with 10 or fewer workers.

Trends in Work-Related Injuries and Illnesses

Occupational injury data suggest that workplace fatalities have decreased since implementation of the act, even though employment has substantially increased. Estimates differ, however, on the number of fatalities. For example, BLS reported that in 1988 there were 3,300 fatalities—down from 4,970 in 1974. In contrast, the National Safety Council reported 10,600 fatalities for 1988—down from 13,800 in 1970. One reason for the difference is that BLS, in its calculations, only includes fatalities in worksites with 11 or more workers and excludes public sector employers and the self-employed. Using the BLS estimates as a lower bound, we estimate that for employers with 11 or more workers, there were at least 13 workplace injury fatalities for each working day in 1988.

No reliable data are available about trends in fatalities because of work-related illness. According to a 1985 Office of Technology Assessment report,[6] the most commonly quoted annual estimate for workplace deaths because of illness is 100,000. However, according to the report, others have cited estimates ranging from 10,000 to 210,000 deaths. More accurate estimates are difficult to obtain for several reasons. First, there is a general lack of information on both past and current worker

[6]Preventing Illness and Injury in the Workplace, U.S. Congress, Office of Technology Assessment, OTA-H-256 (Washington, D.C., Apr. 1985).

exposures. Second, the deleterious effects of workplace exposures are not always known. Finally, multiple factors may exist that make it impossible to assign a single "cause" to a disease.

Although fatalities because of workplace injuries have decreased, the number of workdays lost because of injuries—a measure of injury severity—has significantly increased. The average number of lost workdays per 100 full-time workers rose from 54.6 in 1974 to 76.1 in 1988. In 1988, about 11,000 workers were injured seriously enough each day to lose work time or to be put on restricted work activities. A total of 56.9 million workdays were lost as a result of work-related injury or illness in 1988.

OSHA's impact on injury and illness rates is largely unknown. Injury and illness rates are affected by a number of factors. These include the effects of the business cycle; various changes in the administration of workers' compensation; other socioeconomic factors, such as a shift from a manufacturing (high-risk) to a service (low-risk) economy; and OSHA. The Office of Technology Assessment report concluded

> "There is a general belief that the presence of OSHA has increased manager and worker awareness of occupational health and safety. This increased attention has also created a need for health and safety professionals and probably increased their role in company decisionmaking. The presence of a Federal regulatory agency may lead employers to anticipate potential health and safety problems and solve them before regulatory action becomes necessary. The OSH Act also created new rights for worker information and participation concerning health and safety."[7]

Objective, Scope, and Methodology

The Chairman and the Ranking Minority Member of the Subcommittee on Health and Safety, House Committee on Education and Labor, asked GAO to conduct a broad review that would identify ways in which worker safety and health might be better ensured in this country. The request encompassed administrative changes that could be made at OSHA, as well as possible changes to the legislation.

We collected information on how federal programs protect workers from occupational safety and health hazards, the perceived problems with such approaches, and options for improvement. The areas we examined

[7]Preventing Illness and Injury in the Workplace, p. 264.

were (1) setting and enforcing safety and health standards, (2) providing education and training, (3) collecting injury and illness data, (4) evaluating program effectiveness, and (5) conducting safety and health research. In our review, we considered the roles of administrative agencies, employers, and workers.

We collected information through (1) interviews with federal and state program administrators as well as safety and health experts from labor, management, and academia; (2) a mail questionnaire to a random sample of OSHA safety and health compliance officers and to all supervisors;[8] (3) a literature review; (4) agency procedures and performance data, where applicable; and (5) recent legislative initiatives to improve worker safety and health introduced in the 99th, 100th, and 101st Congress.

We also identified different and additional program elements administered by states with OSHA-approved state programs and MSHA. For three state programs, we obtained performance data, when available, on approaches that OSHA did not use or that were different from the federal program.

We did our review between July 1988 and October 1989. In September 1989, we briefed OSHA officials about the problems we identified concerning the OSHA program and the options contained in this report.

The data (inspection and penalty statistics) we obtained from OSHA's management information system are unverified, except to the extent that we made consistency checks and received assurances about validity of data from OSHA officials. In all other aspects, our work was carried out in accordance with generally accepted government auditing standards.

Further detail on the methodology we used is provided in appendix I.

[8]In the report, we use the term inspectors to refer to the combination of compliance officers and supervisors whose responses we describe.

OSHA's Regulatory Strategy

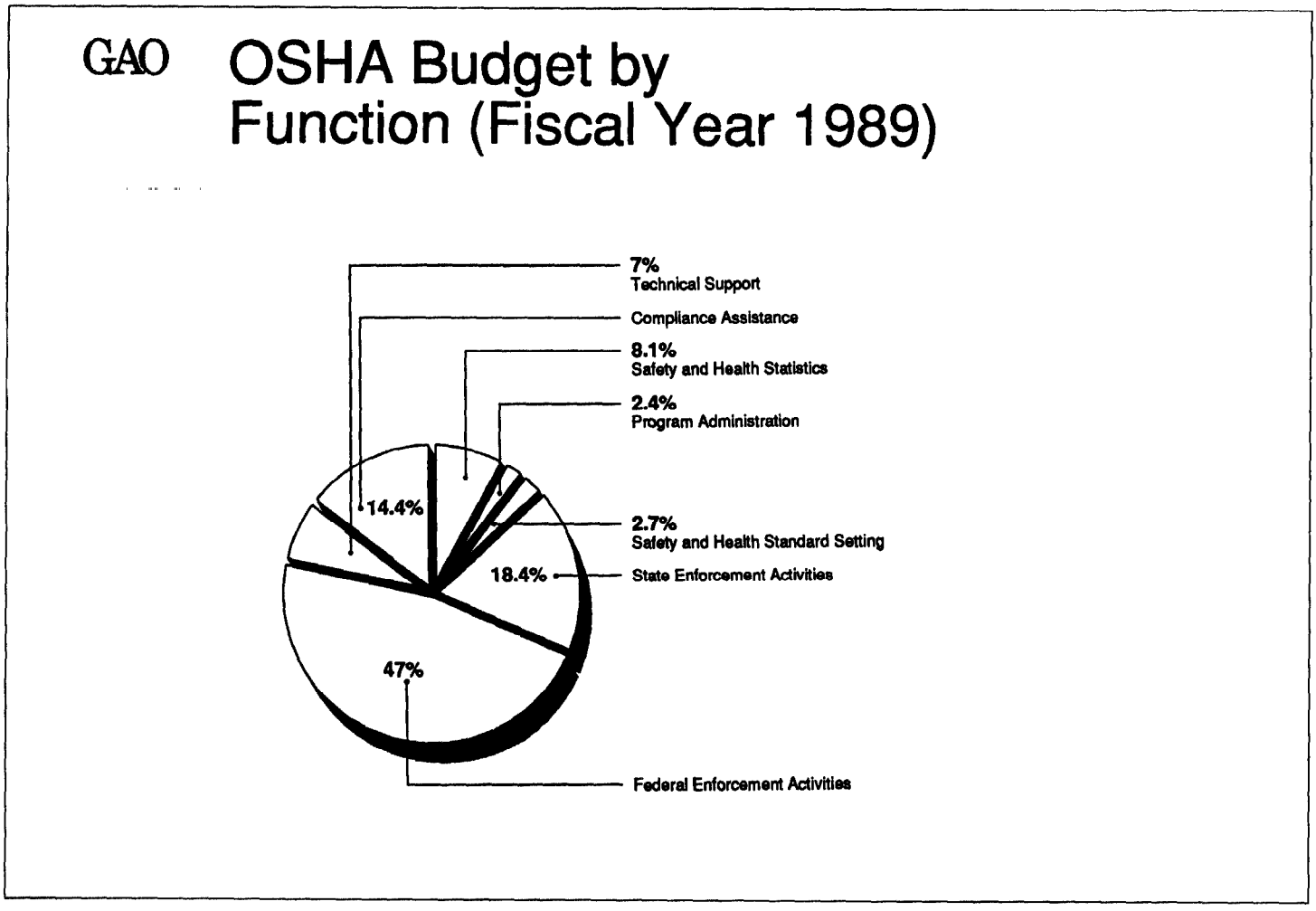
OSHA has broad discretion to decide which strategy or strategies to employ and the level of resources to allocate to its various programs. Nevertheless, the act places emphasis on setting and enforcing standards as a means to bring about a workplace free from safety and health hazards. The act also provides for other OSHA and private activities. These activities included agency education and training designed to acquaint the public with (1) workplace hazards, (2) means of abatement, and (3) voluntary efforts—by individuals, groups, and the private sector—to reduce injury and illness in the workplace.

OSHA defines its strategy as largely relying on voluntary compliance by employers and workers. OSHA noted that, ideally, enforcement actions, with appropriate citations and penalties, should be necessary only when employers fail—for whatever reason—to consider safety and health as an integral part of their responsibilities to workers. Consequently, OSHA combines enforcement with educational and assistance efforts. The agency promotes training and education through formal training and assistance programs, training requirements in many OSHA standards, and other agency activities. For example, inspectors are expected to educate employers and workers as part of their inspection activities.

OSHA's allocation of resources to implement its strategy is shown in figure 2.1. Of the $248 million OSHA budgeted in fiscal year 1989, about 47 percent went to federal enforcement activities; another 18 percent went to state enforcement activities;[1] and about 3 percent went to standard setting. Compliance assistance—which includes education, training, and consultation—was the other major area, making up about 14 percent of the budget.

[1]OSHA funds up to half the cost of state-operated safety and health programs.

Figure 2.1



Note: Technical support activities support both standard setting and enforcement activities.

Enforcement Activities

OSHA's enforcement strategy relies on inspecting worksites; citing employers for noncompliance with OSHA standards and the act's general duty clause, which requires employers to provide each employee with employment and a workplace that is free from recognized hazards that cause or are likely to cause serious physical harm or death; and verifying that employers have abated hazardous conditions. This strategy is characterized by inspection of high-hazard industries; response to formal worker complaints; pursuit of civil penalties; the reduction of fines for prompt abatement; and reliance on employers' assurance that

abatement took place. (These procedures are described in more detail in app. II.)

OSHA's enforcement procedures are intended to bring about safe and healthful working conditions in two significant ways. First, OSHA's unannounced workplace inspections and fines are intended to provide an incentive for employers to correct hazards before being inspected. Second, OSHA tries to get employers to abate hazards that have been identified through inspections. The agency issues abatement orders, conducts follow-up inspections, and imposes daily penalties for failure to abate.

In setting the standards to be enforced, OSHA's current standard-setting strategy emphasizes setting performance-based and generic standards. Performance-based standards regulate end results rather than describe physical characteristics needed to meet a standard. For example, a performance-based standard would specify that a ladder should support a certain amount of weight rather than specifying the material of which it should be made. Generic standards regulate multiple problems in single industries or regulate work practices and procedures affecting many industries, rather than addressing only a single hazard. The hazard communication standard is an example of a generic standard providing information to employers and workers on hazardous chemicals.

Roles of Employers and Workers

The Occupational Safety and Health Act contains roles for both employers and workers. Both are expected to be knowledgeable about OSHA standards and regulations so that hazardous workplace conditions are identified and corrected. Employers are also expected to provide a workplace that is free from safety and health hazards; workers are expected to comply with safety and health procedures to protect themselves and other workers. Workers may also report to OSHA any unsafe and hazardous work practices.

OSHA's primary way of helping employers and workers carry out these roles is through education and training, which is provided in two ways: (1) agency-funded activities and (2) employer-funded activities (see app. III). Agency-funded training activities include workplace consultation visits at the request of employers, grants to worker and employer associations for safety and health training, and such training at the OSHA

Training Institute. In addition, more than 100 OSHA standards and guidelines mandate or recommend minimum levels of training employers should provide.

Data Collection and Evaluation

OSHA's overall strategy also includes acquiring an information base with both (1) data on work-related injuries and illnesses and (2) evaluative information on how well OSHA policies, procedures, and programs are functioning. The importance of injury and illness data was emphasized by the act's requiring that (1) employers record injury and illness information and (2) the Department of Labor establish a system to collect such data. Labor's strategy for obtaining injury and illness data is to (1) rely primarily on survey data collected by BLS and (2) supplement these data with other data, such as the results of NIOSH's monitoring activities. OSHA has an evaluation system that is intended to help it monitor—through a combination of internal studies and studies obtained from outside sources under contracts—the effectiveness of its various programs and policies.

Although we examined the problems and options available for strengthening data collection and program evaluation, the only such option we present in this report is strengthening inspection targeting by obtaining better injury and illness data (option 4, discussed in sec. 3). OSHA and BLS, recognizing their data problems, are already exploring ways to make other improvements in data collection, for example, expanding the injury and illness data employers will record and report. Alternative approaches were pilot tested in fiscal year 1989; BLS will start using the approach selected in 1991, and complete implementation is expected by 1993.

We noted that OSHA conducts few evaluation studies. Many important questions about how well programs and policies work are going unanswered. For example, it would be useful to test the utility of some of the approaches used by state-operated programs but not by OSHA—approaches such as (1) using workers' compensation data to target inspections; (2) inspecting after all accidents, not just accidents resulting in a fatality or hospitalization of five or more workers; and (3) requiring employers to have safety and health programs. Nevertheless, we recognize that an agency has to weigh the costs of such studies against other priorities.

Strengthening Enforcement

OSHA's enforcement activities could be improved by enhancing the standard-setting process so as to regulate more hazards, increase deterrence, and facilitate hazard abatement.

Enhance Standard Setting

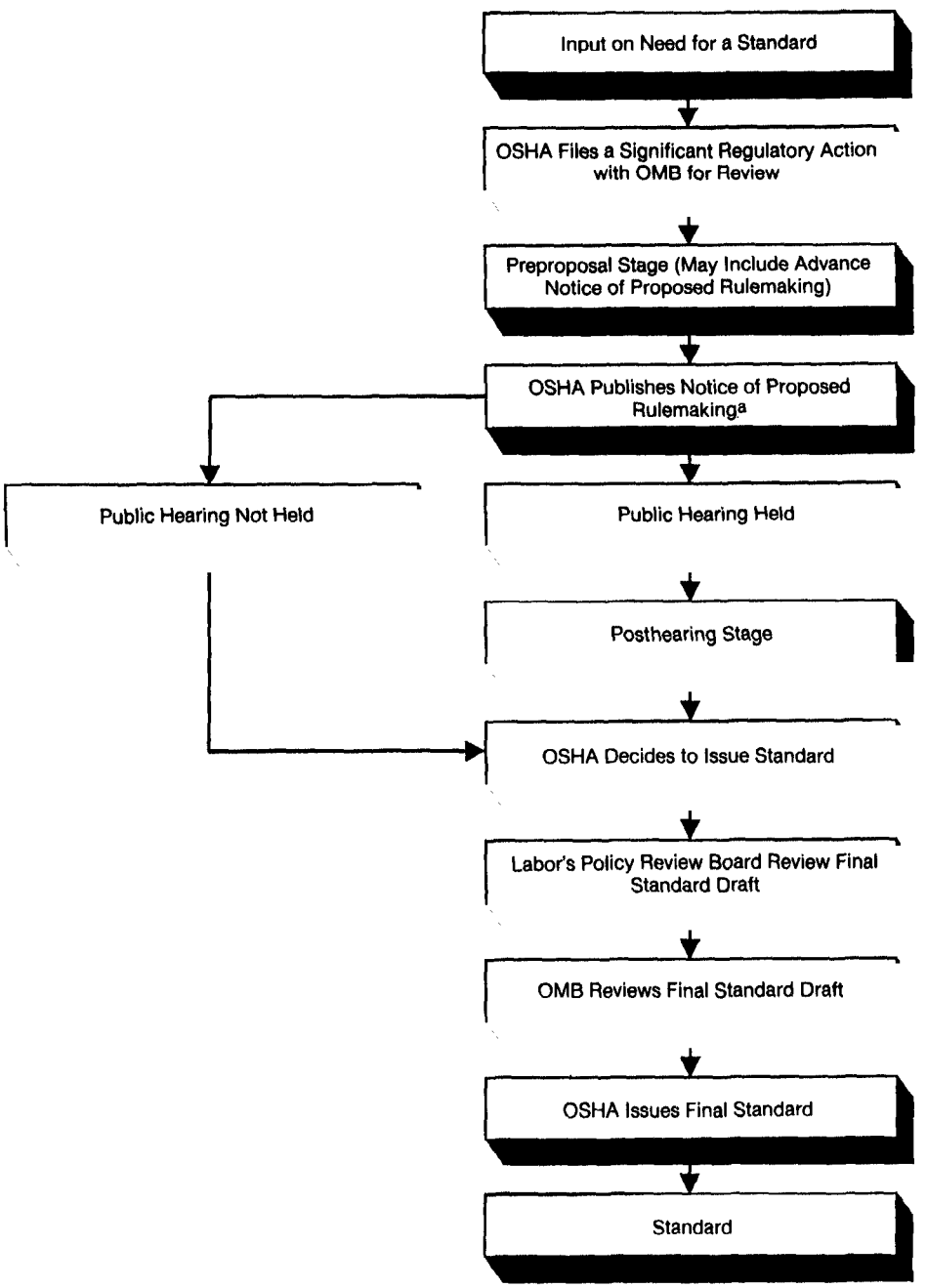
Examples of Problems With Standard Setting

OSHA standards fail to (1) cover many health and safety hazards adequately and (2) keep pace with knowledge about new or existing hazards. In the health area, estimates of the number of new chemical products introduced into the workplace range from 1,000 to 3,000 a year.[1] In comparison, as of 1989, OSHA standards regulated only about 630 substances, most of which are accounted for by a single air contaminants standard. This standard specifies permissible exposure levels, but does not include other features, such as exposure monitoring, medical surveillance, and removal. Fewer than 30 substances hazardous to health are regulated by more comprehensive standards. Many of the safety standards initially set are outdated or fail to address important workplace hazards. For example, a presidential task force in 1976 estimated that the standards governing machine guards that OSHA had adopted in 1971 covered only 15 percent of the machine types then in use. As of 1989, these standards had not been updated.

Agency officials and outside experts have identified excessive delays in standards promulgation as a major cause of the gap in coverage by standards. As of May 1988, 14 of the 27 standards OSHA had in process through the basic rulemaking procedure (see fig. 3.1) had been under development for over 4 years. Some examples of delayed individual substance standards include those regulating butadiene, cadmium, and methylene chloride. Standards for all three substances remained in the preproposal stage as of December 1989, despite 2 to 4 years having passed since OSHA announced its intention to begin work on these standards and put them on its regulatory agenda.

[1] House Committee on Science and Technology, Neurotoxins at Home and in the Workplace, 99th Cong., 2d Sess., 1986, H. Doc. 99-827.

Figure 3.1: OSHA 6(B) Standard-Setting Process



[a]During this stage, Labor's Policy Review Board and OMB review the proposed standard draft.

Some standards regulating serious hazards were in process almost a decade before completion. For example, OSHA issued a final lockout or "tagout" standard, governing the sudden activation of machinery, in September 1989, after the standard had been in process since June 1980.[2] (In our questionnaire, OSHA inspectors had cited a lockout situation as second in importance only to "confined space" as a hazard unregulated, at that time, by a specified standard.)

The time required to promulgate standards is a problem not only with setting standards using the basic rulemaking procedure but also with revising initial start-up health and safety standards that were established under section 6(a) of the act. This section allowed OSHA to adopt, without additional rulemaking, those standards established by other federal agencies or adopted by national consensus.[3] Under current law, OSHA can only revise these consensus standards through its regular section 6(b) rulemaking process (see fig. 3.1), even if the proposed revisions are relatively noncontroversial and widely accepted.

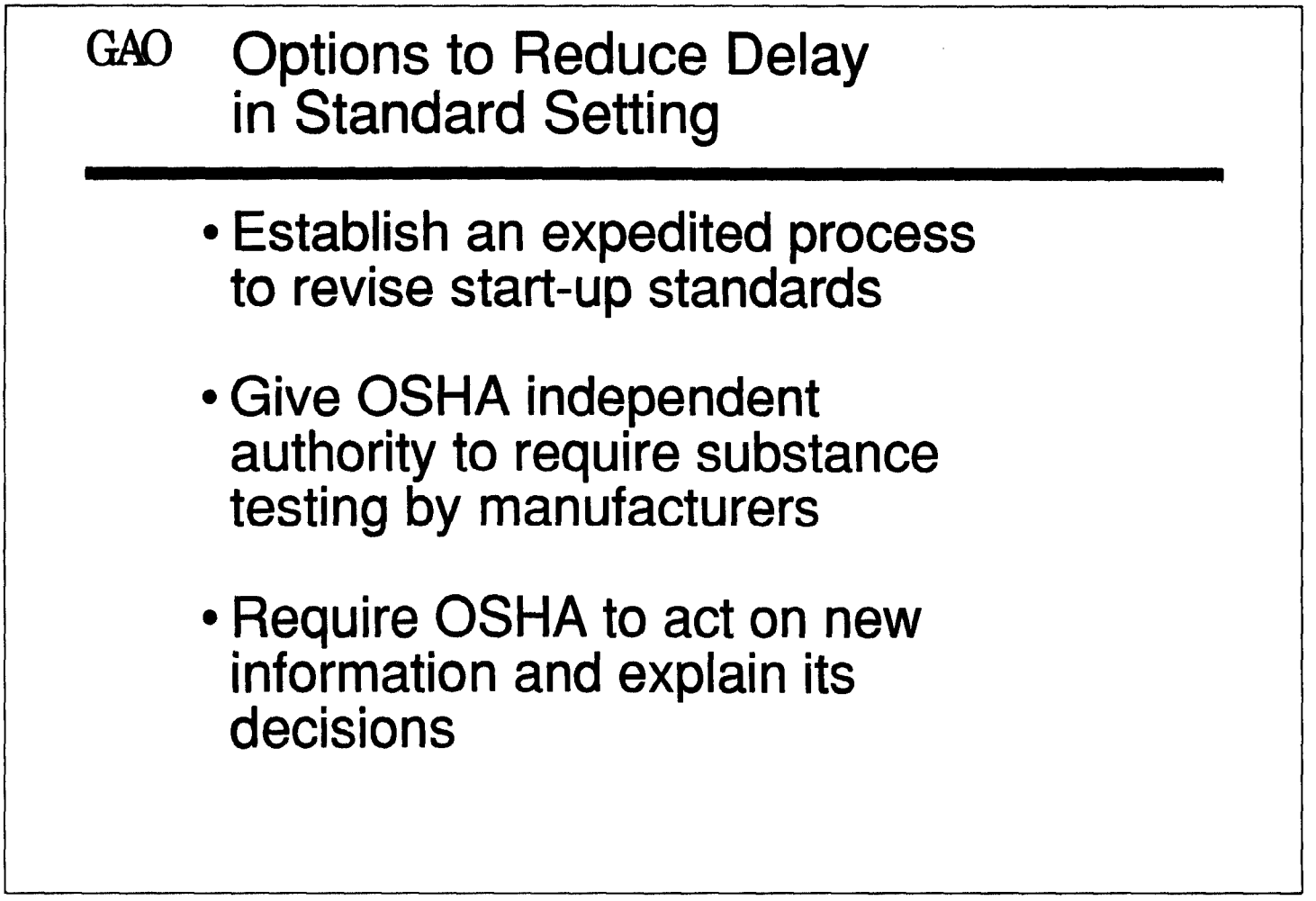
Options for Enhancing Standard Setting

There is no single answer to OSHA's standards-setting difficulties. Increasing staff and funding for standard setting would probably increase the number of standards. However, OSHA estimates suggest that additional resources alone may not be sufficient. Three legislative options, including their advantages and disadvantages, are discussed below (see fig. 3.2).

[2]This standard requires either (1) lockout, locks on machines to prevent their being accidentally energized or activated, or (2) tagout, tags warning of machine hazards when this warning would provide the same degree of workplace protection as a lockout.

[3]Most of these start-up standards were safety standards issued by organizations such as the American National Standards Institute. In addition, these start-up standards established permissible exposure levels for about 400 substances by using the threshold limit values set by the American Conference of Governmental Industrial Hygienists.

Figure 3.2



Option 1: Establish an Expedited Standard-Setting Process for Revision of Start-Up Standards

The Congress could amend the act to permit the agency to use an expedited process to revise the section 6(a) start-up standards. Such a procedure would enable OSHA to (1) provide workers with updated protection from hazardous substances that may be relatively noncontroversial but now lack adequate coverage and (2) keep existing standards current with scientific and technological advances.

Several proposals would allow OSHA to develop more readily proposed revisions to the start-up standards. For example, the Administrative Conference of the United States has recommended the use of outside,

nongovernmental consensus standards for some hazards.[4] In the health area, these consensus standards could be the threshold limit values established by the American Conference of Governmental Industrial Hygienists (ACGIH), NIOSH recommendations, or some combination of these and other organization guidelines. Such an expedited process would be restricted to the revision of the permissible exposure levels.

Alternatively, OSHA could set up a special unit whose purpose would be to gather information in order to revise existing exposure limits. Every 2 or 3 years, this unit would propose revisions, based on the consensus it identified in the scientific literature, to the exposure limits. OSHA could internally evaluate this list of proposed revisions to permissible exposure levels and use public hearings to obtain additional information.

After OSHA had developed the proposed revisions, the Congress could allow OSHA to use a streamlined rulemaking process, outside of the regular 6(b) procedure, to make the revisions. To revise the start-up standards, the Congress, for example, could allow OSHA to use the same section 6(a) authority again or the Congress could allow OSHA to use modified 6(b) procedures, such as an abbreviated notice and comment period for public input or more strictly circumscribed public rights.

Even though the revisions themselves might be limited in scope, OSHA would still have the option to propose complementing standards covering medical surveillance, exposure, or other issues. This would be consistent with the act's approach of initially establishing a minimum level of protection for workers, to be followed with more comprehensive regulation. However, critics point out that a focus on revising the permissible exposure levels may reduce the pressure on OSHA to secure more comprehensive protection.

Perhaps the most difficult issue to resolve in carrying out an expedited process would be the choice of the consensus standards OSHA would use as the basis for revision. In the health area, OSHA used the threshold limit value guidelines issued by ACGIH in revising the 1989 air contaminants standard. Yet, some observers have criticized those guidelines as poorly supported by scientific evidence. On the other hand, using NIOSH recommendations may pose other problems. In making recommendations, NIOSH is not required to consider such factors as the feasibility of

[4]T.O. McGarity and S.A. Shapiro, OSHA Regulation: Regulatory Alternatives and Legislative Reform, Administrative Conference of the United States (Sept. 1987), p.1101.

implementation, which OSHA would have to consider in revising the standards; thus, additional work may be needed to modify NIOSH recommendations for use in operational standards.

Having OSHA develop its own consensus standards from reviews of the literature and other available information may avoid some of these difficulties, but that approach may be unacceptable to employers and workers. The procedure OSHA would use to determine what hazardous substances it will update and their level of regulation would have to be persuasive to encourage participation by employers and workers and avoid litigation.

Further, recent agency success in its 1988-89 efforts to revise the start-up standards on air contaminants raises the question of whether an expedited process is necessary. OSHA used the regular 6(b) rulemaking process and the 1987-88 ACGIH threshold limit value guidelines to revise the permissible exposure levels. The agency completed the project in about 18 months, a short time compared with other OSHA health standards. However, it is unclear whether that success was an aberration or a demonstration of the agency's ability to revise standards quickly. It appears to have been accomplished, in part, by diverting a substantial portion of the program funds that would otherwise have been used for evaluation and other activities. Moreover, interested parties are challenging the standard in the courts where, as of April 12, 1990, it faced a total of 17 lawsuits.

Option 2: Give OSHA Independent Authority to Require Substance Testing by Manufacturers

The Congress could provide OSHA with limited authority to require data collection and testing by manufacturers of hazardous substances, that is, chemicals and air contaminants.[5] OSHA could function more effectively if it had better data, particularly about the risks posed by chemicals. However, epidemiological and animal test data have been published for only a limited number of the thousands of chemicals found in the workplace. In addition, most testing of chemicals that are candidates for regulation is done outside of the government—by university researchers, commercial laboratories, or manufacturers themselves—and OSHA must await the results. If OSHA was able to require manufacturers to test substances slated for regulatory action, the agency would

[5]The Congress did something similar under the Toxic Substances Control Act. EPA has authority under the act to order anyone who manufactures or processes a chemical to test it under certain conditions. The act established the Interagency Testing Committee, with representatives from eight agencies, including OSHA, to make recommendations to EPA concerning which chemicals should be tested. The committee compiles a list of recommended chemicals for EPA to require testing by manufacturers.

most likely have better data on which to base standards and could improve its regulatory performance.

However, requiring manufacturers to perform tests could result in duplication of NIOSH's research activities. The relationship of NIOSH and OSHA in determining the list of substances to be tested and the type of testing to be done would have to be specified.

Option 3: Require OSHA to Act on New Information and Explain Its Decisions

OSHA could be held accountable for responding promptly to outside requests for standard-setting actions. OSHA receives periodic recommendations from several sources about the need for standard-setting activity. For example, NIOSH recommends (1) exposure limits for potentially hazardous substances or conditions in the workplace and (2) preventive measures designed to reduce or eliminate the adverse health effects of these hazards. OSHA's own standing advisory committees on specific topics also provide the agency with recommendations.

OSHA is not required to respond or make public comment on recommendations from NIOSH or its standing advisory committees, but OSHA is required to respond to certain chemical referrals from EPA. Under section 9(a) of the Toxic Substances Control Act, EPA may refer to other agencies, including OSHA, a chemical that EPA believes poses an "unreasonable risk." For example, EPA would request that OSHA determine whether a chemical substance poses a risk to workers and whether a rulemaking action by OSHA would sufficiently reduce the risk.

Under section 9(d) of the act, EPA can also refer substances to OSHA when EPA has determined that a substance is a workplace hazard, but has not found "unreasonable risk."[6]

OSHA has considered that issuing an Advanced Notice of Proposed Rulemaking meets the legislative requirements to respond, and EPA has accepted this position. Even providing this response, however, has not come quickly. For example, OSHA took 6 months to agree with EPA that OSHA has authority to regulate butadiene and that the substance poses an unreasonable risk; it took an additional 6 months to issue the advanced notice. OSHA took similar amounts of time to respond to an EPA referral on glycol ethers.

[6]During the last 8 years, EPA has referred the following to OSHA: three substances under section 9(a) and four under section 9(d).

To facilitate greater agency accountability and the use of existing information as well as public input, the Congress could require OSHA to list NIOSH recommendations and EPA referrals in its regulatory agenda along with OSHA's proposed plan of action on each. As for advisory committees, OSHA could publish committees' recommendations for public comment. At the close of the comment period, OSHA could summarize and give its own views within a specified period of time. However, this option could result in OSHA's overextending its resources as it attempts to respond to each item.

Increase Deterrence

Problems With Deterrence

The deterrent effect of OSHA enforcement efforts has been a problem for at least two reasons. First, because of limited resources, OSHA inspects most employers rarely, if at all. Second, sanctions for noncompliance are weak. Civil penalties, on the whole, have been low, particularly when compared with the cost of abatement. The available criminal sanctions are limited and rarely result in a conviction.

Infrequent Inspections

In fiscal year 1989, we estimate that OSHA had about 800 compliance officers (not including about 300 supervisors and trainees) to inspect almost 3.6 million employers and about 55 million workers. State-operated safety and health programs had an authorized staffing level of about 1,050 inspectors covering 2.3 million employers with an estimated 34 million workers. According to our questionnaire data, inspectors averaged 72 inspections in fiscal year 1988. Safety compliance officers averaged 102 inspections, and health compliance officers averaged 32 inspections.

OSHA tries to target scheduled inspections to worksites thought likely to be hazardous but, in fact, conducts relatively few inspections in high-hazard worksites. For example, in fiscal year 1989, only 10 percent of the worksites OSHA identified as high hazard for safety reasons were inspected. Similarly, only 3 percent of the worksites identified as high hazard for health reasons were inspected. Of these inspections, about half were conducted in response to specific evidence of hazardous conditions at a worksite, such as complaints or referrals.

In addition, OSHA's inspection targeting procedures are hampered by data limitations in each of three major targeted ("programmed") inspection categories: safety inspections in high-hazard manufacturing industries, safety inspections in the construction industry, and health inspections in high-hazard industries.[7] For example, OSHA targets safety inspections outside the construction industry on the basis of manufacturing industries' average lost workday injury (LWDI) rates, as found in the BLS annual occupational safety and health survey.[8] But using BLS annual survey data has several shortcomings, including employers' underreporting, time lags between collection and availability of data, and lack of OSHA access to "establishment-level" (employer) survey data.[9]

As OSHA pointed out in its comments on this report, it has recently taken several steps to extend its impact beyond the inspection of individual worksites. In 13 instances, OSHA has been able to get the employer to agree not only to correct violations found on the OSHA inspection, but also to make similar corrections in other plants owned by the employer where the same violative conditions exist. Moreover, in two instances, OSHA used review of records at corporate headquarters to identify violations without having to visit the separate worksites of the individual company. If used more extensively, these strategies could significantly increase the impact of OSHA's inspections.

Limited Penalties

Even when worksites are inspected, the penalties have less impact than originally intended. OSHA's penalties have gone unchanged since the act was enacted in 1970. The maximum fines range from $1,000 for a nonserious violation to $10,000 for willful and repeat violations. About 76 percent of the OSHA inspectors we surveyed believed that the civil fines allowed by the act should be increased to provide a stronger deterrent effect.

OSHA has sometimes levied substantially higher penalties than the maximum by citing employers on an instance-by-instance approach. With

[7]Targeting procedures for firms in low-hazard manufacturing and nonmanufacturing industries are based on random selection, but these procedures account for few inspections. Most of OSHA's programmed inspections are safety inspections done in construction or manufacturing industries.

[8]An LWDI rate is the average number of injuries that required days away from work or restricted work activity per 100 full-time workers per year.

[9]For example, a study done for GAO compared fiscal years 1985, 1986, and 1987 OSHA inspection results for over 2,700 inspections with the LWDI rates those employers reported to BLS. It was found that the number of serious violations per inspection was more closely related to an employer's LWDI rate than to whether the employer was in a low-hazard or high-hazard industry.

this approach, employers who are "egregiously" violating OSHA standards are cited for every instance of a standard violated, rather than being assessed one penalty for a certain type of violation, such as recordkeeping. Consequently, the assessed fines can be substantially larger than the maximum $10,000. However, OSHA has used this approach sparingly—about 100 times—and an individual instance, no matter how severe, is still limited by the act. The majority of the OSHA inspectors we surveyed (61 percent) said this approach should be used more often, and 46 percent believed that such penalties have a significant effect on other employers' compliance with OSHA requirements.

OSHA policies for initially proposing and, in many cases, subsequently reducing fines further limit any deterrent effect. For example, although violations classified as "serious" by OSHA carry a maximum fine of $1,000, the average assessed penalty per serious violation was $261 in fiscal year 1988. This occurs, in part, because the initial fine proposed may be as much as 80 percent less than the maximum depending on the employer's (1) size of company (fine can be reduced up to 40 percent); (2) good faith (30 percent), which usually means the employer has already abated or promises to abate the hazard quickly; and (3) history of previous violations (10 percent). In addition, OSHA area office directors are authorized to further reduce the proposed fine as a result of informal discussions with an employer.

Limited Criminal Sanctions

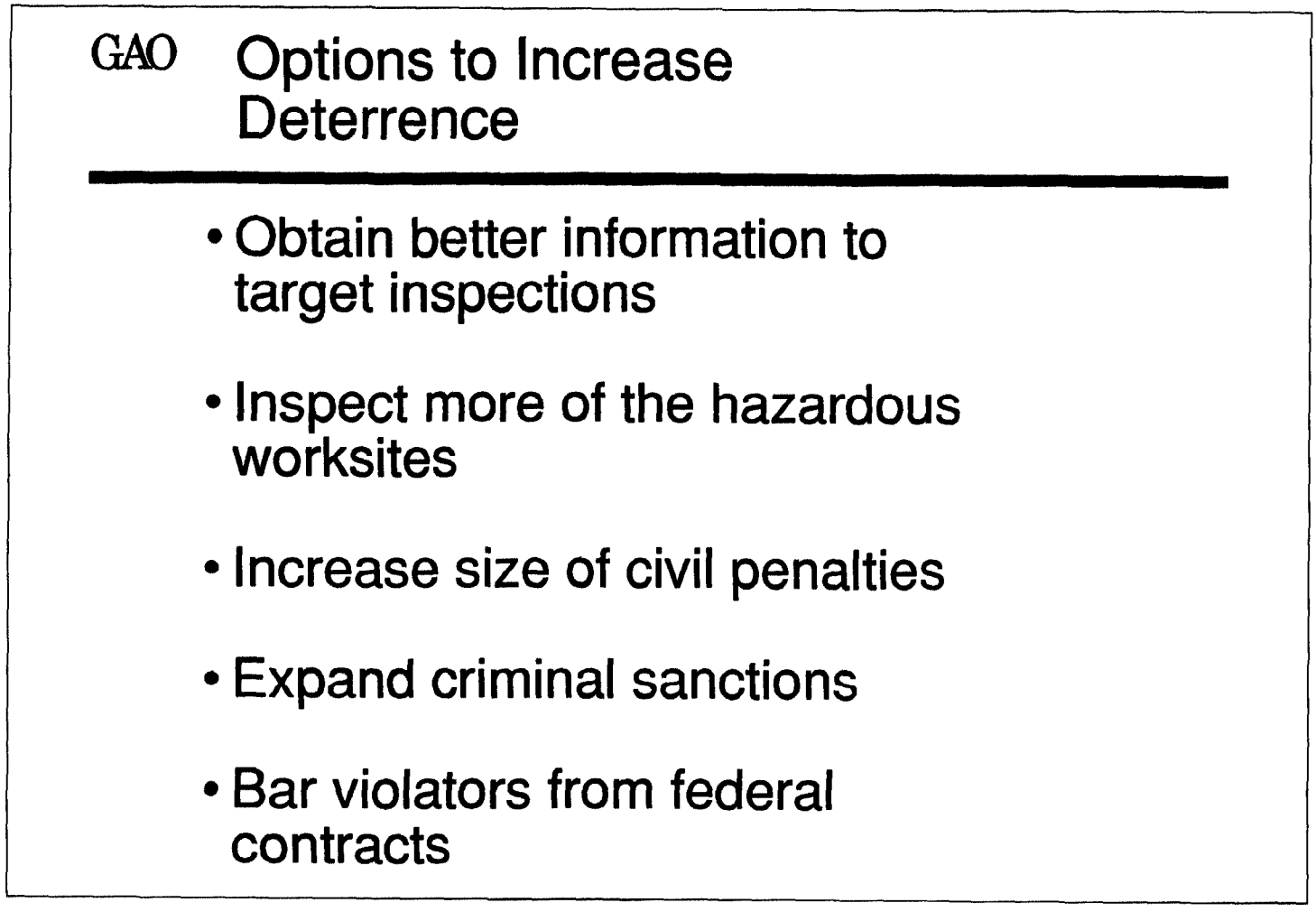
OSHA has the authority to refer certain violations to the Department of Justice for criminal prosecution. However, successful criminal prosecution has been very limited. The act only allows criminal penalties if (1) an employer willfully violates OSHA regulations, resulting in a worker's death, or knowingly makes false representation or (2) a person knowingly tells an employer that an inspection is scheduled.

In the use of criminal sanctions, OSHA has referred 57 cases to the Department of Justice since 1970—22 of them since 1986. Of the 57 cases, 14 cases (25 percent) resulted in convictions. In over half of the cases, the Department of Justice declined to prosecute.

Options to Increase Deterrence

We believe that the options we describe may increase the deterrent effect of OSHA's enforcement program (see fig. 3.3). These options have possible advantages and disadvantages, including added costs to OSHA or employers or both. We grouped these options into those that increase

Figure 3.3



the probability of inspecting hazardous worksites and those that would impose stricter penalties for violations. Increasing inspections of the more hazardous worksites might be accomplished by (1) obtaining better information to target inspections and (2) reducing the amount of time inspectors spend on inspections when there are no serious violations. Stricter penalties could come from higher civil penalties, expansion and use of criminal sanctions, or loss of the right to participate in federal contract competition.

Option 4: Obtain Better Information to Target Inspections

The information OSHA might use to better target programmed inspections could come either from (1) requiring employers to report data they are already required to record at worksites or (2) using other data sets that already exist or could be created.

Option 4a: Require Certain Employers to Report Injury and Illness Data to OSHA

Labor could require certain employers to report injuries and illnesses directly to OSHA, regardless of whether these employers report to BLS as part of the annual survey sample. Direct reporting of these data, which OSHA already requires employers to record at their worksites, could provide systematic detailed data, thereby improving the use of inspection resources. One approach would be to require such reporting of all employers in high-hazard industries. A second approach would require this for all employers, regardless of industry, that have injuries and illnesses above certain levels. The effectiveness of OSHA's targeting program may, thus, be enhanced by targeting programmed inspections using an individual employer's injury rate. In addition, OSHA could focus its enforcement, as well as education and training efforts, on employers with high injury and illness rates in industries known to be hazardous.

Direct reporting should place no additional recordkeeping burden on employers. This is because employers are already required to record information on every work-related injury and illness, even though no employers are required to report this information to OSHA and most employers are not required to report it to BLS. When dual reporting to OSHA and BLS would occur, the employer could send the data to OSHA, which would, in turn, send it to BLS.

The major disadvantages in the first approach are (1) some employers might be encouraged to underreport injuries and illnesses, (2) OSHA would still lack information about establishments with high injury and illness rates that are not in high-hazard industries, and (3) additional OSHA resources would be required to analyze the data.

In the second approach, OSHA could focus its enforcement, as well as education and training activities, on all employers with high injury and illness rates. A major advantage of this approach is that all establishments with high injury and illness rates would be required to report and none would be overlooked. However, this approach would constitute an even higher incentive than the first approach for employers to underreport injuries and illnesses.

Option 4b: More Fully Use Other Data

OSHA could explore the availability and potential use of other data to help identify the most hazardous worksites to inspect. These data include (1) workers' compensation records, (2) accident reports, (3) construction permits, and (4) notices of hazardous substances being used at worksites.

The Occupational Safety and Health State Plan Association reported that 16 of the 25 states or territories that administer their own occupational safety and health programs use the first category of data, workers' compensation, for a variety of safety and health-related purposes. Most often these data are used to aid in scheduling worksite inspections. The second category, accident reports, is another potential source of data on worksites that may be useful for targeting inspections. These reports would make a potentially powerful data base for identifying industry hazards and targeting inspections. At the very least, such an accident data base could generate ideas for special emphasis inspection programs. At present, however, employers only report fatal accidents or "catastrophes" (hospitalization of at least five workers) to OSHA. Thus, many accidents that might suggest safety and health violations are not reported to OSHA. In contrast, MSHA requires mine operators to report all accidents resulting in injury or death and some accidents that do not.

The third category, construction permits, could be required to help OSHA target projects that involve a substantial risk of injury, as is done in the California state program. In practice, it could be more a matter of contractors notifying OSHA. This notification could be required selectively for federally funded projects, for projects above a certain cost, or for specific hazardous operations (such as trenching or high-level scaffolding). H.R. 4652, pending before the 101st Congress (1989-90), for example, would require all construction contractors to provide the Secretary of Labor with specified data before commencing construction work.

The fourth category, notices of hazardous substances, could be a useful supplement to, or substitute for, targeting based on previously identified health violations. Some inspectors pointed out that it would be helpful to know what chemicals are being used at individual worksites and in what quantities. Some employers report these data under the Emergency Planning and Community Right to Know Act of 1986. OSHA may be able to use these data to better target health inspections.

The advantages of improved inspection targeting would be an increase in inspection activity at hazardous worksites, giving a greater return for OSHA's inspection effort. A more credible inspection targeting policy might also better encourage employers to abate hazards before they are inspected. Potential difficulties and disadvantages include the time and resources invested in identifying and testing targeting alternatives and, possibly, in collecting additional data. Finally, as long as OSHA has the resources to visit only a fraction of the nation's worksites each year, even the best possible inspection targeting system will leave many hazardous worksites uninspected.

Option 5: Inspect More of the Hazardous Worksites

OSHA could inspect more of the hazardous worksites if it (1) reduced the time spent on inspections with nonserious violations and (2) allowed private-sector consultations to substitute for some inspections.

Option 5a: Reduce Time Spent on Inspections With Nonserious Violations

One way to increase the number of inspections each inspector can conduct is to spend less time on inspections with no serious violations. This could be done by preparing no citation if the only violations were ones that OSHA considers to be "nonserious." In fiscal year 1989, OSHA issued about 11,000 citations that involved only nonserious violations; 27 percent of all inspections resulting in citations were for nonserious violations only. According to OSHA officials, to do this in the federally operated program would require a change in the legislation, even though at least three states with OSHA-approved, state-operated programs are using such a procedure.

California, Nevada, and Washington use this procedure to reduce the processing time for nonserious violations; this enables these states to focus inspection resources on more serious violations. Under this procedure in the California state program, employers agree, during an inspection, to abate the nonserious violation(s) and waive their appeal rights. In turn, the state agrees not to issue a citation. According to OSHA region IX officials, using this procedure, state inspectors in Nevada averaged 14 percent more inspections.

This procedure could allow OSHA inspectors more time for other functions, such as programmed inspections of high-hazard employers, without increasing the inspection work force. A disadvantage of using this procedure may be that there would be little incentive for employers to correct minor violations until inspected because there would be no risk of a fine. However, there is already little financial incentive to avoid a fine because the average fine is $2 per nonserious violation.

Option 5b: Allow Private-Sector Consultations to Substitute for Some Inspections

Another way to stretch the existing inspection work force would be to allow, under certain conditions, consultations by OSHA-certified private sector safety or health specialists as substitutes for targeted inspections. This would be an extension of OSHA's current policy of allowing certain small employers, through its consultation program, to obtain a 1-year exemption from targeted inspections. This program grants these exemptions to employers who receive a comprehensive consultation visit, correct all identified hazards, and demonstrate that they have an effective safety and health program in operation.[10]

OSHA could extend this option to other employers, including those who now are unable to obtain services under the consultation programs funded by OSHA and the states, because those programs give priority to small employers. By allowing employers to pay for these consultations, OSHA's costs would be limited primarily to (1) establishing procedures for certifying private sector specialists and (2) monitoring the quality of the services these specialists provide, as OSHA now monitors the consultation programs states provide.

A possible disadvantage of such an approach is the potential conflict of interest. The safety or health specialists might be reluctant to antagonize employers by identifying all the hazards. A vigorous monitoring role by OSHA would be needed to overcome such difficulties.

Option 6: Increase the Size of Civil Penalties

Given that OSHA is unable to inspect many worksites, it needs other ways to deter violators. Higher civil penalties are one potential deterrent. Increasing the maximum civil penalties is one way to enable OSHA to assess larger fines; another way is to more fully use existing penalties.

Option 6a: Increase the Maximum Civil Penalties

The Congress could increase the maximum civil penalties established in the act. OSHA's inspectors strongly endorsed the need to increase the maximum civil penalties in order for penalties to serve as a deterrent to employer safety and health violations. Almost half believed the penalties should be greatly increased; only 2.7 percent believed the penalties should be decreased. Half of the inspectors also believed that the maximum penalty for willful violations should be at least $25,000 per violation and $5,000 for serious violations. Penalty increases suggested by OSHA inspectors are about the same as those proposed in S. 490 during the 101st Congress. This bill would raise (1) the current penalty

[10]Relatively few (about 2 percent) employers who receive consultation visits request an inspection exemption. OSHA officials believed employers may consider it too difficult to demonstrate that they have an effective safety and health program.

limit of $1,000 for a serious violation to $3,000 and (2) the current $10,000 limit for willful and repeated violations to $30,000.

Option 6b: Fully Use Existing Penalties

Without any legislative change, OSHA could increase the penalties employers pay by (1) initially proposing higher penalties, (2) making fewer or smaller reductions in initial proposed penalties, and (3) making greater use of maximum penalties, such as the $1,000 a day penalty for failure to abate.

According to the act, an initial proposed penalty can be set less than the maximum by considering a number of factors, such as the size of the company. Although the act is silent concerning the extent to which these factors can affect the penalty, OSHA's guidelines allow for up to 80 percent reduction from the maximum for these factors. This reduction rate could be lowered to increase the deterrent value of penalties.

OSHA justifies reductions to the initially proposed penalty primarily as a means to get employers to abate workplace problems quickly without delaying abatement by contesting citations. (If employers contest citations, they do not have to abate the cited hazard until the case is resolved, thereby leaving workers unprotected.) For example, between March 1986 and February 1990, OSHA reached agreements with employers cited for egregious violations that reduced the initially proposed fines 66 percent—from a total of $29 million to $10 million—even though these employers had put their workers at serious risk through noncompliance. OSHA argues that the reductions were needed, in part, to have employers abate hazards quickly. However, by doing so, OSHA may be giving employers the impression that they will not be significantly penalized even if they willfully or repeatedly violate safety and health standards.

Penalties for failure to correct a violation may be up to $1,000 for each calendar day that the violation continues beyond the final abatement date. However, OSHA's Field Operations Manual says that normally the total proposed penalty for failure to abate shall not exceed 10 times the amount of the daily proposed penalty. Some inspectors believe that OSHA should not restrict the failure-to-abate penalty. They believe an employer should be penalized for each day that a violation goes unabated to provide an incentive for employers to abate hazards.

A possible negative consequence of OSHA's levying higher fines is that doing so might increase conflict between employers and OSHA, leading to more contested cases.

Option 7: Expand and Use Criminal Sanctions

To deter employers from willfully violating OSHA standards, the Congress could increase the severity of the act's criminal sanctions and encourage OSHA to use such sanctions. The Congress has criticized OSHA's record on the number of cases OSHA has referred to the Department of Justice for criminal prosecutions—57 in almost 20 years.[11] This number has been seen as indicating a reluctance to use criminal sanctions.

OSHA could do more administratively to obtain evidence, particularly on the necessary issue of criminal intent. OSHA has no investigation unit to handle potential criminal cases. Instead, it relies on the inspector to review the accident scene and to recommend appropriate action. Furthermore, the employer has 48 hours to report a fatality accident, even though it is generally recognized that getting to an accident scene quickly enhances an investigation.

In contrast, the state of California has an investigative unit—the Bureau of Investigations—for accidents. It consists of 10 people, 8 of whom are investigators, and fatalities must be reported immediately. In addition, California law is less restrictive than federal law, allowing criminal prosecution for a wider range of violations. The investigative unit provided data to local district attorneys who filed charges in 41 of 92 cases referred to them in 1985-86 alone. In comparison, the Department of Justice filed charges in 19 of the 57 OSHA referrals from 1970 to February 1990. As of February 1990, the Department of Justice had seven open cases.

The Congress could also increase the strength of sanctions for criminal cases so they correspond to the seriousness of the offenses. The size of the fine is, in the opinion of the Assistant Attorney General for Legislative and Intergovernmental Affairs, no longer limited by the act;[12] in addition, legislative changes could remove other limitations on the strength of criminal sanctions. These changes might address the nature

[11]See Getting Away With Murder in the Workplace: OSHA's Nonuse of Criminal Penalties for Safety Violations (H. Rept. 28, Oct. 4, 1988).

[12]According to the Department of Justice, the Crime Control Act of 1984, which increased criminal fines for willfully violating federal statutes to $250,000 for individuals and $500,000 for companies, is applicable to Occupational Safety and Health Act provisions. Such fines should increase the prosecutive appeal of OSHA cases. However, OSHA officials told us that they have yet to pursue a criminal sanction under the Comprehensive Crime Control Act.

of the charge that can be brought, the potential period of imprisonment, or the conditions under which criminal prosecution can be pursued. Under the act, a criminal violation is a misdemeanor offense with a 6-month maximum jail sentence; employers can only be charged for cases in which fatalities occur. These punishments may be doubled for convictions following the first offense. In contrast, the Resource Conservation and Recovery Act of 1976, which deals with hazardous waste, provides for up to 5 years' imprisonment for knowingly putting a person in imminent danger of serious bodily harm or death, whether or not a fatality occurs.

The Department of Justice supports the idea of increasing OSHA's criminal sanctions against employers for violation of OSHA standards. Responding to a congressional committee, the Department of Justice said, in a January 1989 letter, that it "would also be inclined to give serious consideration to proposals to expand the application of criminal sanctions to include violations which lead to serious injuries in addition to those which lead to the death of an worker."

According to OSHA officials, however, increasing criminal sanctions could lead to delays in having hazards abated. Employers would be more inclined to contest violations that could possibly result in criminal charges.

Two bills are pending before the 101st Congress—S. 2154 and H.R. 4050—which would expand criminal sanctions by (1) making violations felonies and (2) allowing OSHA to pursue criminal sanctions in certain nonfatality cases, as well as substantially raising the maximum penalty amount.

Option 8: Bar Violators From Federal Contract Competition

Federal agencies could use information from OSHA to bar employers who repeatedly violate OSHA safety and health standards from competing for federal contracts. Doing so could be an incentive for employers to comply with safety and health standards. Currently some agencies can do this administratively, but to achieve wider applicability legislation is probably needed. The federal government would, thus, be using the economic leverage of contracts to encourage employers to comply with OSHA regulations. The significant dollar value of federal construction contracts alone could provide a strong incentive for employers to meet OSHA regulations.[13]

[13]For example, the Chicago Tunnel and Reservoir Plan project in Chicago represents federally funded capital expenditures of over $1.2 billion.

For example, construction projects that receive EPA assistance must comply with various federal regulations, including OSHA standards. In cases for which there is sufficient evidence of failure to meet responsibilities under the OSHA regulations, both contractors and grantees—bidders—could be debarred or suspended from eligibility for future EPA financial assistance.

It is unclear how different agencies should interpret the records of bidders' compliance with OSHA standards. If agencies are required to devise their own criteria to evaluate an employer's health and safety record, inequities may result as companies are able to win contracts from some agencies but are ineligible for contracts with other agencies. Any regulation setting such criteria should pay attention to these issues as well as those of equity and administrative cost.

Improve Hazard-Abatement Procedures

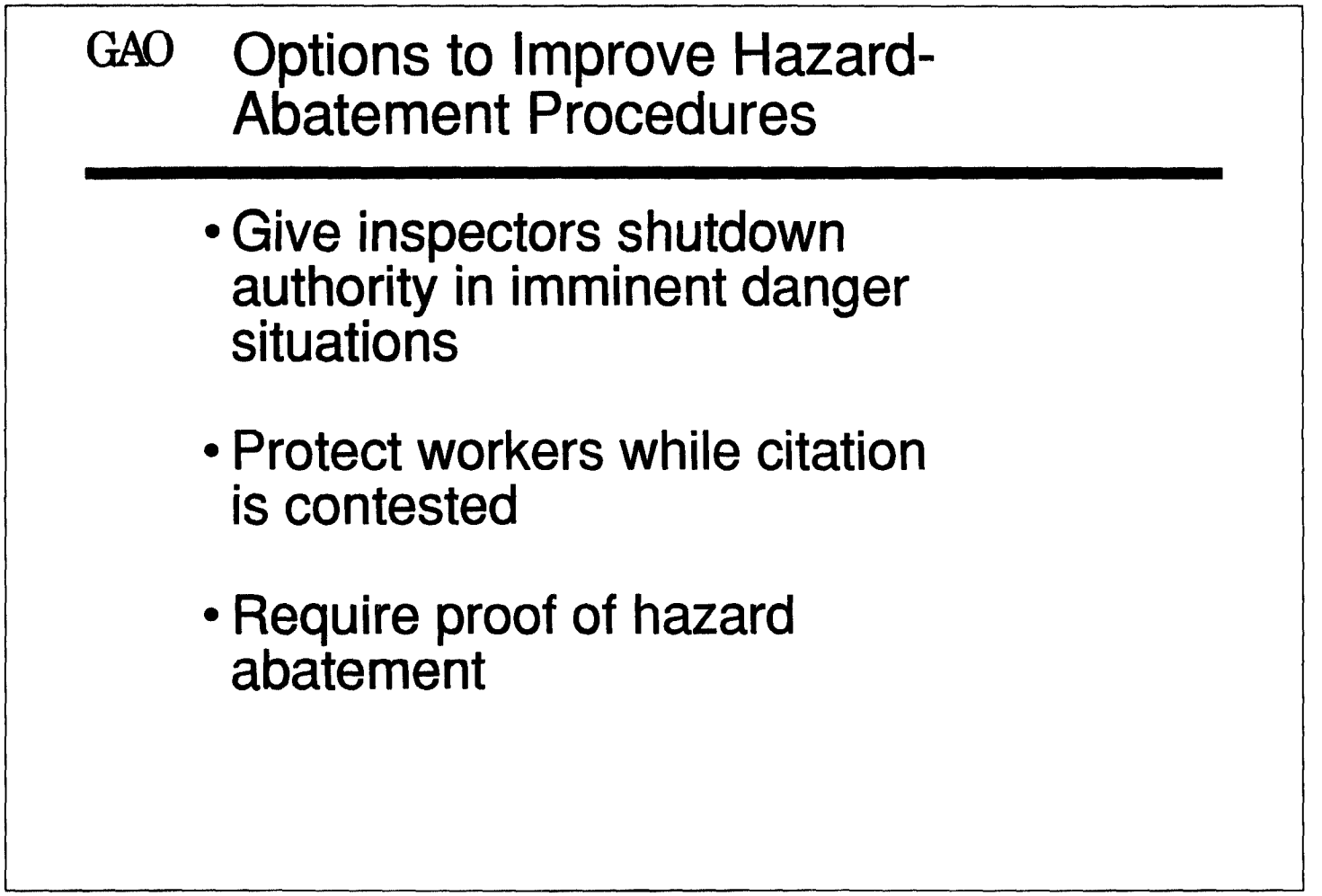
Problems With Hazard Abatement

Some employers have little incentive to abate promptly the hazards OSHA inspectors identify. Abatement can be delayed while (1) OSHA obtains a court order to get imminent hazards corrected or (2) employers contest an OSHA citation. In addition, OSHA conducts few follow-up inspections to confirm that employers have complied with their agreements to abate hazards; OSHA also does not require that employers provide evidence, such as photographs or invoices, that abatement has taken place.

Options to Improve Abatement

We believe that two options to better ensure abatement (see fig. 3.4) would encourage employers to abate the identified hazards more quickly—both in imminent danger situations and where the employer is contesting the citation. A third option would give OSHA more information about which employers have complied with their agreements to abate hazards.

Figure 3.4



Option 9: Give Inspectors Shutdown Authority in Imminent Danger Situations

In cases of imminent danger, the Congress could give OSHA inspectors shutdown authority without having to obtain a court order. MSHA and some state-operated safety and health programs have similar authority.

Imminent danger conditions should be quickly abated and, according to OSHA inspectors, generally are. OSHA could not provide data concerning the time involved in obtaining abatement of imminent dangers using the current procedures, which are described in appendix II. OSHA can usually get a court injunction, a region IX OSHA official said, within 24 hours. However, OSHA inspectors reported that workers were injured while OSHA was attempting to get abatement. Almost 80 percent of the OSHA

inspectors said they should have shutdown authority in cases of imminent danger.

One disadvantage of this approach might be that inspectors would abuse the shutdown authority. However, the experiences of MSHA and the California state program provide little evidence that this would occur. In fiscal year 1988, MSHA used its shutdown authority for imminent danger about 1,200 times in the 97,217 inspections performed—about 1 percent of the inspections. In fiscal year 1987 (latest available data), the California program used its shutdown authority 72 times while conducting about 18,500 inspections—about 1 percent of the inspections.[14]

Option 10: Protect Workers While Citation Is Being Contested

The Congress could require employers to abate hazards while the employer is contesting a citation or penalty, providing workers with greater protection during this period. According to the act, if an employer contests OSHA's findings, the employer does not have to abate the hazard until the case is resolved except in two situations: The employer must correct the hazard when (1) only the penalty amount is contested or (2) the hazard presents an imminent danger to workers. However, according to OSHA's deputy director for compliance programs, an employer rarely contests only the penalty amount—the employer usually contests the entire citation.

If a hazard does exist, workers will continue to be at risk throughout the period of dispute over the citation. Given that the number of contested inspections has risen in recent years (from 1,055 in fiscal year 1984 to 3,372 in fiscal year 1989), protection may be delayed for an increasing number of workers.

A disadvantage to requiring abatement before disagreements are resolved is that the employer must comply before having his or her case heard—and the actions undertaken may ultimately be judged unnecessary. As a compromise, employers could be encouraged to provide at least temporary protection without requiring complete hazard abatement. If the employer refuses to provide reasonable protection for workers while a citation is in dispute, the employer could be assessed a surcharge or additional penalty if OSHRC upholds OSHA's citation. Another option could be additional penalties if workers are injured while an employer is contesting a citation. The act would need to be amended to implement either alternative.

[14]It should be noted that shutdown does not necessarily mean closing an entire worksite, but, for example, shutting down a piece of machinery because the safety guard is missing.

Option 11: Require Proof of Hazard Abatement

OSHA could, with an administrative change, establish a regulation requiring employers to provide proof that abatement has taken place. This would supplement OSHA's current primary reliance on voluntarily provided written assurance from the employer.

Seventy-two percent of OSHA inspectors believe that abatement verification procedures should be changed. Of those, 75 percent believed that OSHA should do more follow-up inspections. While follow-up inspections would provide the best assurance that abatement has taken place, OSHA has too few inspectors to do many follow-ups. In the absence of follow-up inspections, OSHA needs to obtain evidence from employers in other ways. Currently, OSHA asks employers to provide documentation, such as invoices and photographs, along with their statements that abatement has taken place. However, there is no penalty to employers for failing to provide this evidence and, when it is not submitted, OSHA has only the employer's statement unless a follow-up inspection is performed. A regulation requiring documentary evidence might give OSHA better information about compliance.

Strengthening the Roles of Employers and Workers

One way to improve safety and health in the workplace may be to strengthen the roles of employers and workers. This would mean both (1) encouraging employers and workers to identify and correct workplace hazards and (2) increasing OSHA's education and training efforts so that employers and workers would have the information they need to do so.

Problems With Current Roles of Employers and Workers

The major problems with the current involvement of employers and workers are their (1) lack of information about workplace hazards and how to correct them and (2) minimal active involvement in improving workplace safety and health.

OSHA inspectors and safety and health experts whom we interviewed expressed concern about the effectiveness of OSHA's education efforts in meeting the needs of employers or workers. In general, the most common criticism was that OSHA was providing insufficient education and training to workers and employers. Specific criticism was directed at OSHA for providing too little information to small employers and to certain groups of workers, such as those who are in construction, non-English speaking, employed in small businesses, and nonunion.

Many experts we interviewed believed that employers can take a more active role in providing worker safety and health. They believe that too many employers limit their efforts to compliance with specific standards—if they even do that—rather than taking a more assertive approach of systematically reviewing work operations, identifying risks, and establishing controls to avoid accidents and work-related illnesses. The reasons cited for low levels of employer involvement in safety and health activities range from insufficient economic incentives to lack of employer knowledge about OSHA and its regulations. Most workers have little involvement in workplace safety and health other than complying with rules designed to protect workers, such as wearing personal protective equipment. For example, the act, in contrast with legislation authorizing safety and health programs in the states of Oregon and Washington, does not require employers to consider workers' input on safety and health.

In addition, OSHA inspectors believe workers should be more involved in some activities now available to them. Fifty-nine percent of the inspectors said workers should be more involved in requesting an OSHA inspection; 65 percent, in accompanying inspectors as they walk about (called

walkarounds) during inspections; and 70 percent, in participating in settlement discussions.

According to OSHA's Field Operations Manual, inspectors should ensure worker representatives are afforded an opportunity to participate in inspectors' walkarounds. However, in fiscal year 1989, only about 17 percent of all OSHA walkarounds included worker representatives. In unionized worksites, 40 percent of the walkarounds included worker representatives. In nonunion worksites, the participation was only about 4 percent. In a case in which a worker representative does not accompany the inspector, the inspector is required by law to consult with a reasonable number of workers concerning matters of health and safety in the workplace. It is difficult to obtain worker representatives at nonunion worksites, OSHA officials said, to accompany inspectors. This is also true for participating in settlement discussions.

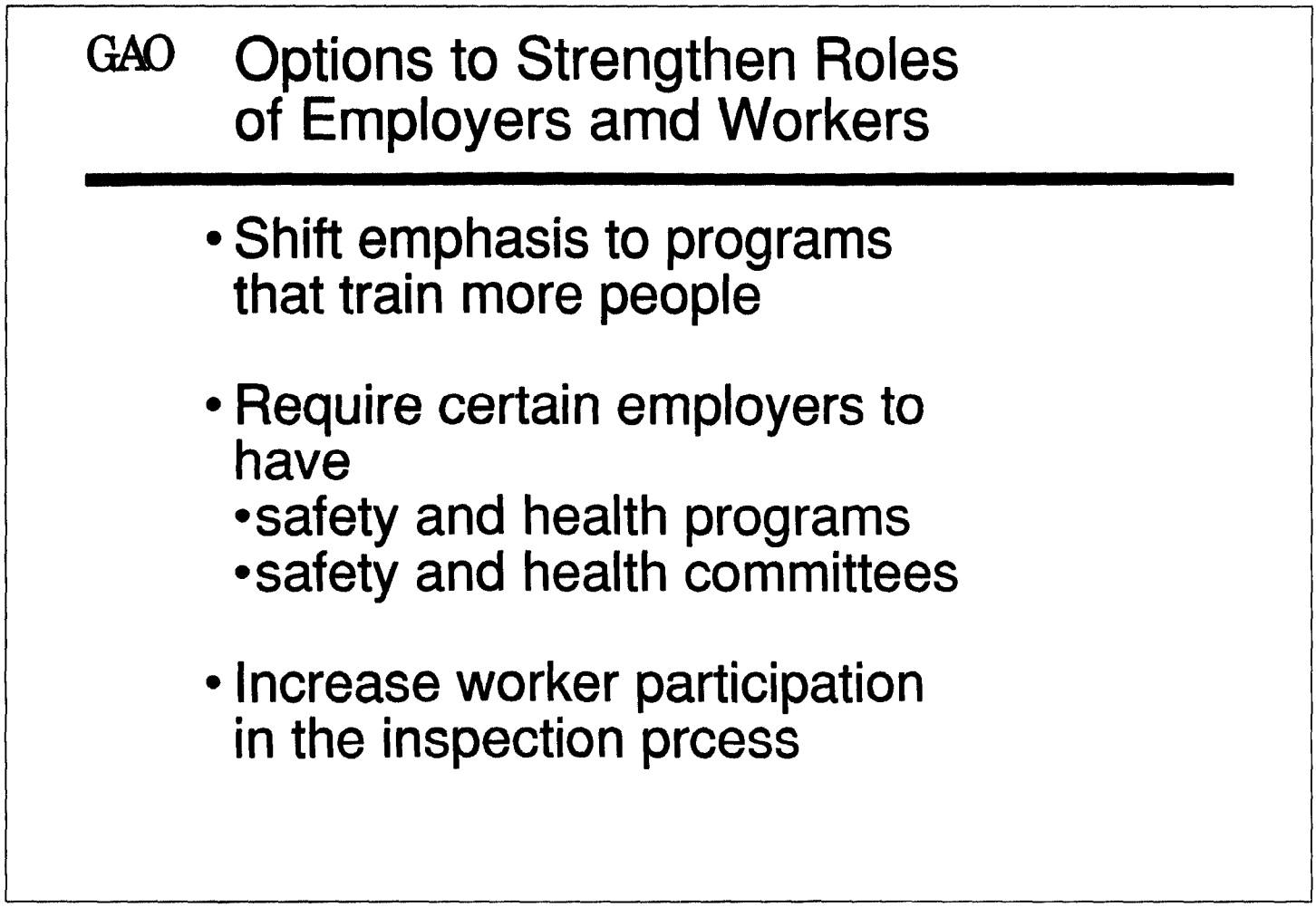
One reason for workers' lack of involvement may be their fear of reprisal from employers. Recent GAO testimony pointed out that inspectors believe workers cannot freely exercise their rights without fear of reprisal.[1] For example, about one-fourth (26 percent) of the inspectors said workers have little or no protection from employer reprisals when they report violations to OSHA; only 15 percent said workers are well protected. OSHA officials told us that workers may also be reluctant to participate because the employer does not have to pay the worker for the time devoted to inspection activities.

Options to Strengthen the Roles of Employers and Workers

The options presented in this section (see fig. 4.1) are directed toward greater involvement of employers and workers in improving working conditions by (1) strengthening OSHA's education and training efforts, (2) requiring worksite safety and health programs and committees, and (3) increasing worker participation in the inspection process. These options are intended to supplement, not replace, OSHA's enforcement efforts.

[1]How Well Does OSHA Protect Workers From Reprisal: Inspector Opinions (GAO/T-HRD-90-8, Nov. 16, 1989).

Figure 4.1



Option to Improve Education and Training

OSHA could provide more education and training services. Providing more funds for compliance assistance activities would be one way to take care of the need, but it is unlikely that substantially more funds will be available. An alternative way is to make the available funds go further by putting greater emphasis on programs that reach more people directly.

Option 12: Shift Emphasis to Programs That Train More People

OSHA could allocate less of its funds to costly programs that are more costly per trainee and more to programs that are less costly per trainee, thus reaching more people. OSHA's most costly program, per trainee, is

also the one on which most of its education and training funds are spent—the consultation program. (In every year since 1982, OSHA has spent at least 70 percent of its education and training funds on this program.) In 1988, the average cost to OSHA for the consultation program was about $772 per visit. In contrast, the New Directions Program cost OSHA about $50 per worker or employer trained in 1988, according to information OSHA gave us. OSHA has been phasing out the New Directions Program—the number of grantees funded peaked at 156 in 1980, and only 28 grants were awarded in fiscal year 1989—but it could reinstate that program or initiate new ones with a low cost per employer or worker trained.[2]

In considering a shift from one program to another, however, it is necessary to note fundamental differences in the approach of each. The consultation program provides site-specific comprehensive training to employers and can be used to train workers. OSHA officials also noted it is the only program focused on small employers. However, because of their confidentiality, consultation reports provide no information to other employers about safety and health concerns. The New Directions Program provides general, rather than site-specific, information about safety and health problems. It makes grants to labor and employer associations for members' training, which may include conducting workshops or distributing health and safety literature. The grants are intended to stimulate the creation of new, self-supporting education and training programs.

Options to Encourage Employers and Workers to Identify and Correct Workplace Hazards

Options to encourage employers and workers to reduce workplace hazards include (1) requiring certain employers to have safety and health programs, (2) requiring certain employers to have safety and health committees, and (3) increasing worker participation in the OSHA inspection process.

Option 13: Require Certain Employers to Have Safety and Health Programs

OSHA could require certain high-risk employers to develop safety and health programs, as defined by OSHA in recently issued voluntary guidelines.[3]

[2]It has, for example, announced a new training and education program, the Targeted Training Grant Program, to focus on specific safety and health educational needs. However, the announced funding of $340,000 will make it substantially smaller than other training initiatives.

[3]The guidelines outline four principal elements of effective safety and health management: (1) management commitment and worker involvement, (2) worksite analysis, (3) hazard prevention and control, and (4) safety and health training.

In recent years, OSHA has noted the relationship between superior management of safety and health programs—which address all safety and health hazards whether or not covered by OSHA standards—and the low incidence and severity of worker injuries. Consequently, OSHA has two programs that encourage employers to voluntarily develop comprehensive safety and health programs—the consultation program and the voluntary protection program. OSHA data for fiscal year 1989 indicate that the consultation program, which is targeted specifically to small employers, provided technical assistance to over 21,000 small employers. The voluntary protection program recognizes employers who have developed a comprehensive safety and health program and who have injury rates considerably below their industries' average. As of September 1989, 64 employers had been recognized by OSHA.

Although OSHA has encouraged voluntary safety and health programs, most of the people we interviewed believe that OSHA should issue a standard making such programs mandatory for certain groups of employers. An overwhelming number of all inspectors (90 percent) said that repeat violators of OSHA standards and employers in high-hazard industries should be required to have safety and health programs. In addition, about 63 percent of the inspectors supported the idea of requiring such programs for all employers, regardless of industry type or reported numbers of injuries and illnesses. There already exists a standard requiring employers to have safety and health programs in the construction industry, and about half of the OSHA inspectors who had knowledge about the subject believe that this standard has at least "moderately improved" safety and health in the construction industry.

The experiences of the state-operated safety and health programs in Washington and California support the feasibility of requiring these programs. The state of Washington requires all employers, regardless of size, to maintain a written accident-prevention plan. One Washington program official believes that the program helps prevent workplace accidents by getting both employers and workers more involved. In 1989, California passed legislation requiring all employers to establish, implement, and maintain written injury prevention programs. This action was based, in part, on experience with a voluntary self-inspection pilot program, begun in 1979, at large construction sites. Under this program, labor and management agreed to set up joint safety committees and worksite safety programs. A 1983 study summarized the results of this program at six large construction sites. At all the sites, accident frequency rates appeared to be much lower than the industry average. At four sites, injury incidence rates were also lower than for comparable

company projects. No major accidents or deaths were reported at any of the project sites. One company reported savings of $2.4 million through accident prevention. Although the study did not estimate the cost savings to the state, it did report that some costs—such as the cost of citations, appeals, and legal actions—were completely eliminated.

Since December 1988, in Oregon, state workers' compensation insurers have been required to provide free consultation services to employers. Under the state's insurer consultation rules, both insurers and self-insured employers are required to establish and help carry out loss-prevention services so that employers can improve their health and safety programs and reduce on-the-job injuries and illnesses. Little information is yet available about the impact of these activities on safety and health.

In response to OSHA's request for comments on its proposed voluntary safety and health management guidelines, most of the respondents expressed the belief that the guidelines described policies, procedures, and practices that are essential to worker safety and health protection but that can be met by a variety of methods. Most respondents, as well as OSHA, said that a significant number of worksites, particularly small- and medium-sized worksites, often lack the professional resources to develop adequate programs on their own.

Critics are also concerned about the cost of such programs. Cost would depend on many variables, such as the hazardous conditions of the workplace and the number of workers involved. We did not do a cost analysis of this option. Nevertheless, if OSHA determines that these programs are too costly, it may want to require plans only for those employers with high injury and illness rates.

Option 14: Require Certain Employers to Have Safety and Health Committees

OSHA could require all employers, or certain groups of employers, to have joint labor-management committees as a way to resolve job safety and health issues. Such committees are mandated in two U.S. states and in some localities in at least five other countries.[4] Committees can be used to investigate worksite accidents and to conduct regular inspections. They also can be used to settle safety and health disputes and provide input for management decisions about safety and health. In some countries, these committees also can investigate and abate hazardous situations. In the United States, one state (Washington) requires these committees in all worksites with 11 or more workers; Oregon

[4]Australia, Austria, Canada, the Federal Republic of Germany, and Sweden.

requires them in worksites with 10 or more workers and high levels of injuries and illnesses.

Safety and health committees are also provided for in almost half of all union contracts in this country. They exist, in various forms, in non-union worksites as well.

Joint labor-management safety and health committees could encourage local problem-solving and prevention activities, thus decreasing the reliance on OSHA's limited inspection force alone to seek out and order abatement of all worksite hazards. In addition, a state safety and health program official in Washington asserted, examining the minutes of safety committee meetings and talking with committee members helped inspectors conduct inspections; in particular, it gave inspectors information about the employer's commitment to worksite safety.

Granting workers the right to participate in decisions affecting job safety and health could benefit both employers and workers. Without such committees, when workers—especially those in non-union workplaces—spot worksite hazards, they have no structure in place to support them if they report the hazards to employers. Reporting hazardous work conditions to an on-site safety and health committee could more fully and immediately take advantage of worker knowledge than would reporting the hazard to OSHA and waiting for an inspection to be done if OSHA thinks a problem exists. If the employer does not abate the hazard, the worker would still have the option of requesting an inspection from OSHA.

Employers could also benefit from having workers report complaints to the committee since it would be a less adversarial action than requesting an OSHA inspection. Moreover, employers would have a forum from which they could sell their safety and health philosophy. Opening lines of communication may increase participation in safety and health, providing both an opportunity for an employer to use its expertise as well as increasing the role of workers in overseeing their own day-to-day safety practices.

The option of mandating joint labor-management safety and health committees has received mixed support from both employer groups and labor. For example, the AFL-CIO Standing Committee on Safety and Occupational Health recommends mandated worksite safety programs that would include provisions for joint committees. Some employer representatives we interviewed also supported the committee idea in theory.

However, most of them oppose making such committees mandatory rather than voluntary.

Management is often cautious about giving up any traditional management prerogatives. Unions are often concerned about incurring potential liabilities if some of its members are empowered to carry out safety and health tasks that are the responsibility of management.

OSHA officials believe establishing mandated joint committees would be difficult in nonunion worksites because of the difficulty in determining who will represent workers. According to a state official, however, requiring joint committees at nonunion worksites has not been a problem in Washington's program. The state requires that the worker representatives be elected directly by the workers, regardless of whether the worksite is union or nonunion.

Option 15: Increase Worker Participation in the OSHA Inspection Process

OSHA could encourage increased worker involvement in OSHAcompliance activities in order to improve the identification and abatement of hazards in the workplace. Ways to accomplish this include (1) having more worker representatives accompanying inspectors during walkarounds, (2) increasing worker involvement in settlement negotiations or allowing them to contest settlement agreements (legislative changes would be needed), and (3) involving workers in verifying hazard abatement.

Option 15a: Involve Workers in Walkarounds

OSHA could do more to include worker representation in the walkarounds. Even though the Field Operations Manual stresses the importance of workers' involvement, OSHA program officials told us that in practice inspectors have not included workers in many walkarounds at nonunion worksites.[5]

One reason for the limited involvement of nonunion workers in walkarounds may be that the Occupational Safety and Health Act allows for the participation of worker representatives in walkarounds undertaken by OSHA, but it does not mandate that workers be compensated for time spent accompanying an OSHA inspector during walkarounds. Some unions have bargained for walkaround pay or have elected to compensate members who participate in walkarounds. However, in nonunionized workplaces, workers may not be afforded the same benefits. Mandating walkaround pay would ensure that all

[5]Although it could be difficult for an inspector to decide who should accompany him/her on the inspection, the Field Operations Manual already provides some guidance on such situations, and more could be developed.

workers are given the same opportunity to exercise the right to accompany OSHA inspectors during walkarounds, without the fear that their paychecks will be reduced. In 1977, the Secretary of Labor stressed the importance of having walkaround pay by saying that withholding it "[was] inherently destructive of the workers' right to participate in the walkaround and, consequently, impedes the free flow of information between workers and representatives of the Secretary which is so critical to effective enforcement of the act."

Even though a 1978 court decision established that it is within the agency's authority to promulgate one,[6] OSHA currently does not have a rule on walkaround pay. If this option is to be implemented, legislative action may be needed to require OSHA to exercise this authority. Furthermore, the issue of compensating workers for participation in the inspection process may involve more than simply involvement in the walkaround itself. There are other activities in which workers may engage, such as informal OSHA conferences or attendance at safety and health committee meetings, for which compensation might also be considered.

Option 15b: Increase Workers' Participation in Settlement Negotiations

OSHA could take steps to more often include workers' representatives in the settlement negotiations with employers. OSHA asserts that workers have the right to be present during these negotiations, but acknowledges limited worker involvement in nonunion workplaces.

Including workers' representatives in discussions would give OSHA a viewpoint to balance that of the employers. It would give OSHA information on (1) workers' views on the appropriateness of withdrawing the citations or lowering penalties and (2) the feasibility and adequacy of the abatement agreements being reached. OSHRC has recognized that workers or their representatives have the right to be heard concerning the objectives of settlement agreement.

The possible disadvantage of increasing worker participation in settlement negotiations between OSHA and employers is the presence of a potentially hostile third party. This might limit OSHA's ability to exercise practical discretion when determining the final action to be taken against an employer. The objections of workers to settlement agreements may further involve the agency in litigation against employers, which would delay timely remedies to potentially hazardous or fatal safety and health violations.

[6]Chamber of Commerce of the United States v. OSHA, 465 F. Supp. 10 (D.D.C., 1978).

If OSHA is unable to obtain adequate worker participation, for whatever reason, in settlement negotiations, the Congress may choose to amend the act. Workers could be allowed to appeal the final settlement to an administrative law judge for review when there is (1) evidence that the settlement is not serving the purpose of protecting the health and safety of workers or (2) no adequate mechanism for monitoring compliance with the terms of an agreement. However, it should be recognized that providing this worker right could delay hazard abatement while the settlement is being contested.

Option 15c: Involve Workers in Verifying Hazard Abatement

OSHA could establish a mechanism to use workers as a source of information about whether employers have corrected the cited hazards. One way to do this would be to require employers to post at the worksite the information they provide to OSHA about how and when they abated the hazards. This would parallel the current requirement that the employer post the citation notice. Given this information, if workers' observations are inconsistent with the employers' assertions, workers could notify OSHA.

Methodology

Overview

We collected information about how the federal government protects workers from occupational safety and health hazards, perceived problems with these programs, and practical options to improve them. We collected this information through (1) interviews with safety and health experts outside the government, as well as federal and state program administrators; (2) a mail questionnaire to OSHA compliance officers and their supervisors; (3) a review of published articles on safety and health; (4) an examination of OSHA operating procedures, documents, and performance data; and (5) a review of legislative initiatives in the 99th, 100th, and 101st Congress.

We obtained information from OSHA through interviews with headquarters officials and copies of a questionnaire to those individuals responsible for doing and supervising inspections.[1] In commenting on a draft of this report, OSHA expressed concern that in relying on a questionnaire sent to inspectors and supervisors, we missed an important and informed source of information, specifically, regional and area office and senior field managers. We did not send the questionnaire to these officials or systematically obtain data from them. However, in other recent and ongoing GAO reviews, we have talked with OSHA managers at those levels, and we built on that knowledge in designing and implementing this review. Moreover, we did interview OSHA officials in region IX to discuss the OSHA enforcement program in California and OSHA's policies and procedures in general.

For our interviews with 32 safety and health experts outside the government, we selected people who would provide a good balance of perspectives: 8 from labor,[2] 9 from management,[3] 10 from academia, 3 from professional organizations, and 2 with state program experience. Several of them had previously held positions in OSHA or NIOSH.

We met with nine experts in a 1-day structured panel discussion. We conducted the other interviews individually, primarily using a structured interview guide to address areas selected to review. The interviews covered general observations on safety and health in this country; then the interviews focused, in turn, on each topic, asking for the

[1]Questionnaire results will be issued as a separate report in the near future.

[2]Five are labor union representatives and three others represent advocacy groups with, primarily, a labor perspective.

[3]Five were from individual companies; four were from business associations.

problems, if any, the experts saw; what alternatives might be considered; and the advantages and disadvantages of each. We also solicited their opinions on some specific options.

We mailed copies of two different questionnaires to OSHA compliance officers and their supervisors, who are principally responsible for seeing that private employers comply with OSHA safety and health regulations and standards. (For convenience, we refer to all compliance officers and supervisors jointly as "inspectors.") We selected a random sample from current OSHA safety and health officers. All current OSHA field supervisors of safety and health inspectors were also surveyed. The compliance officers and supervisors worked in all 10 of OSHA's regions. The two questionnaires were identical except for minor modifications to reflect wording differences because of compliance officers' and supervisors' different positions and responsibilities.

To identify differences between the programs, we also compared OSHA's operations with approaches used by state-operated safety and health programs. For three state programs—California, Oregon, and Washington—we obtained performance data, when available, on approaches that OSHA did not use or that were different from the federal program. We also identified different and additional program elements by the Labor Department's Mine Safety and Health Administration (MSHA), which protects the nation's miners.

The major factors we considered in selecting options were (1) frequent identification by safety and health experts or in the literature and (2) the extent of evidence we were able to obtain concerning feasibility of the options. We did not analyze the cost-effectiveness of the options. We present the options for congressional and Department of Labor consideration in making legislative and administrative changes.

Sampling Approach for Questionnaire

We obtained listings from OSHA identifying all inspectors as of April 12, 1989. We divided safety and health officers into separate universes and sampled each individually. Within each regional office we selected a random sample of approximately one-third of all safety officers and one-third of all health officers. Universe and sample sizes by type of inspector are shown in table I.1.

Table I.1: Total Inspectors and Total Sampled by Type

Inspector	Total	Sample	Percent
Safety officers	552	184	33.3
Health officers	415	138	33.3
Supervisors	155	155	100.0
Total	**1,122**	**477**	**42.5**

We mailed a questionnaire to each inspector in our sample and to all supervisors; we sent one follow-up mailing to those who initially did not respond. Eighty-one percent of those to whom we sent questionnaires responded.

For the two questionnaires, we were only interested in surveying compliance officers and supervisors who actually did or supervised inspections. OSHA's listings did not identify workers by occupation; thus, we were not able to restrict our sample cases only to inspection staff. We, therefore, used a screening question in our questionnaire to select respondents who were either doing or directly supervising inspections. We deleted from our sample those who were not. The number and percentage considered appropriate for our analysis are shown in table I.2.

Table I.2: Respondents Doing (or Supervising) Inspections by Sampled Group

Group	Sample	Respondents	Sample responding (in percent)	Respondents doing inspections	
				Number	Percent
Safety officers	184	146	79.3	124	84.9
Health officers	138	113	81.9	95	84.1
Supervisors	155	127	81.9	117	92.1
Total	**477**	**386**	**80.9**	**336**	**87.0**

Questionnaire results are projectable to an estimated universe of compliance officers and supervisors who were doing inspections and who would have responded had we sent the questionnaire to everyone. The size of the universe to which results can be projected after adjustments for both the response rate and the rate of respondents' doing inspections are shown in table 1.3.

Table I.3: Universe to Which Questionnaire Results Can Be Projected: Respondent Universe Doing Inspections

		Respondents		Respondents doing inspections	
Group	**Universe**	**Rate**	**Universe**	**Rate**	**Universe**
Safety officers	552	79.3	438	84.9	372
Health officers	415	81.9	340	84.1	286
Supervisors	155	81.9	127	92.1	117
Total	**1,122**		**905**		**775**

The one instance in which we project our questionnaire results without adjusting the universe for the respondent rate is in estimating the number of compliance officers doing inspections. We then assume that the percentage of nonrespondents conducting inspections was the same as the percentage of respondents—84.9 percent for safety and 84.1 percent for health. As a result, we estimated that 818 compliance officers were doing inspections (552 x .849 + 415 x .841). The sampling error is plus or minus 36.

Estimates derived from a statistical sample are subject to a certain amount of sampling error: the possible error that arises because of taking a sample rather than surveying the entire population. Sampling error, also called a precision of the estimate, is given as a plus or minus value around the estimate. The sampling errors for percentages reported did not exceed plus or minus 7 percent for any estimate.

Enforcement Procedures

OSHA's enforcement program primarily consists of the following activities:

- scheduling and conducting inspections,
- issuing citations and assessing penalties, and
- verifying abatement.

Scheduling Inspections

Every worksite covered by the act is subject to inspection by OSHA. An annual rider to OSHA appropriations, however, generally exempts from inspection those employers with fewer than 11 workers and average injury rates below the national average.[1] OSHA administrative practice has been to extend this exemption from programmed inspection to all small employers regardless of their average injury rates.

Inspections are categorized as safety or health inspections. In fiscal year 1989, 81 percent of the inspections were safety inspections. Inspections can also be categorized as either programmed or unprogrammed. Unprogrammed inspections include those that receive priority because of (1) an alleged imminent danger situation, (2) an accident involving a fatality or catastrophe, (3) a complaint alleging serious violations that threaten physical harm, or (4) a referral from other officials, agencies, or the media, describing a potential, serious hazard. Thirty-eight percent of OSHA's unprogrammed inspections in fiscal year 1989 resulted from worker complaints; unprogrammed inspections accounted for about 57 percent of all OSHA's inspections.

Programmed, or targeted, inspections are those that are based on a neutral system rather than specific information about that employer. OSHA has separate targeting procedures for three major inspection categories: safety inspections in high-hazard manufacturing industries, safety inspections in the construction industry, and health inspections in high-hazard industries. Most of the programmed inspections are done in high-hazard manufacturing industries or construction.

Under the current targeting procedure for high-hazard manufacturing industries, each OSHA area office develops its own annual inspection programs based on (1) an OSHA-provided ranking of high-hazard manufacturing industries by industry lost workday injury (LWDI) rate for the state and (2) a listing of high-hazard worksites in that area, in order of

[1]They are, however, subject to inspections based on an unsolicited formal complaint or a reported catastrophe (an accident in which five or more workers are hospitalized) or fatality.

their industry LWDI rates. Industry LWDI rates are based on the results of a BLS annual occupational safety and health survey, and OSHA derives its listing of companies from a Dun and Bradstreet file.

OSHA's primary source for identifying construction sites is the Dodge Reports, a commercial publication identifying planned construction starts. A list of construction sites randomly selected from these reports is provided to area offices monthly by the Tennessee Construction Resource Analysis Department at the University of Tennessee.

When OSHA compliance officers inspect a construction site, they inspect all contractors and subcontractors active at the site—with each contractor recorded as one inspection in OSHA's records. If a site is inactive when visited by the compliance officer, it can be rescheduled in the next year's inspection cycle.

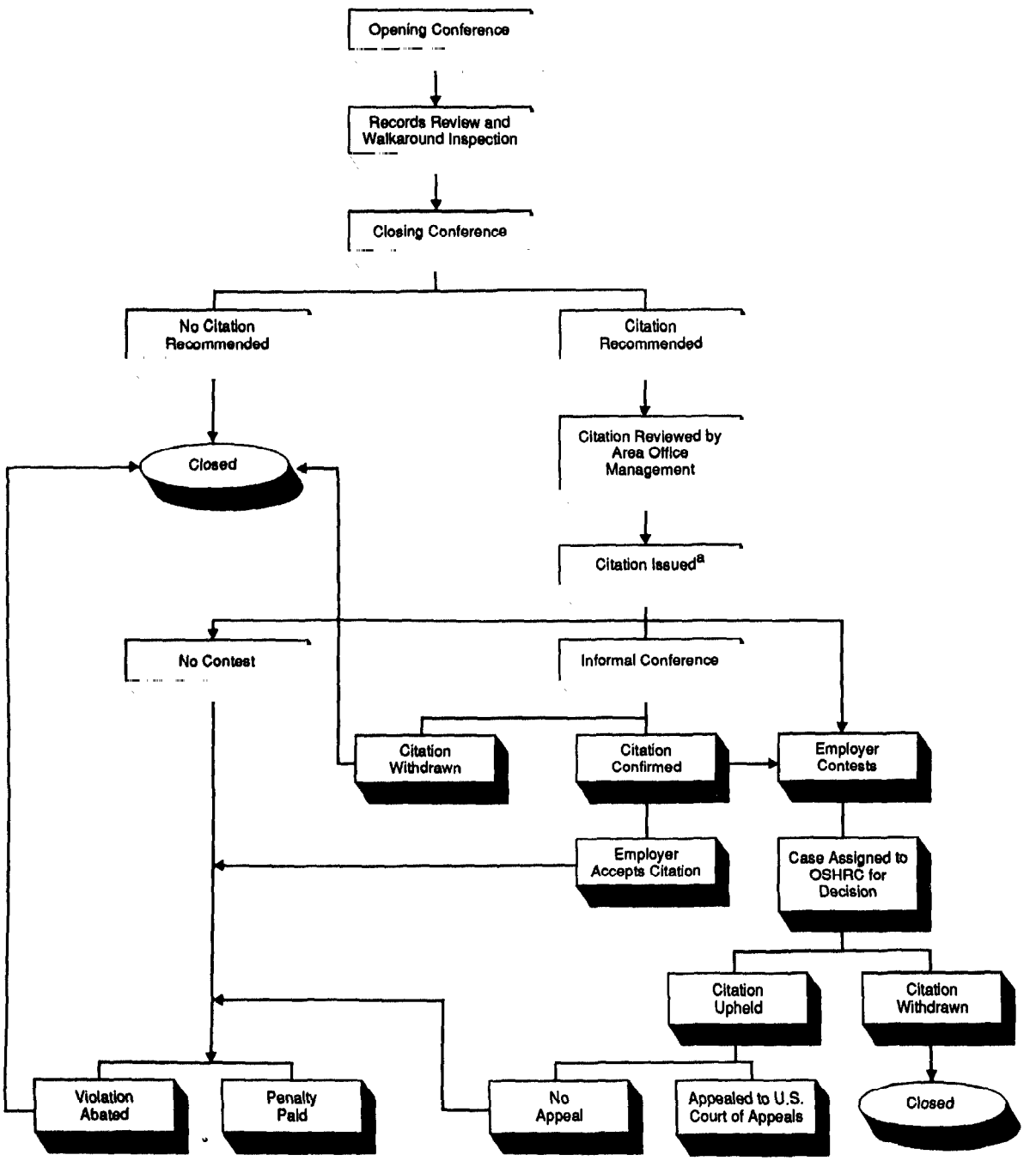
As it does for high-hazard safety inspections, OSHA annually provides each area office with a ranked listing of industries for health inspections and a listing of area worksites in each industry. For the health listings, however, industries are ranked according to the average number of serious health violations cited per OSHA health inspection in that industry. The industry ranking is a national one; therefore, all area offices have the same industry priorities.

From these listings, the area office decides on health inspection cycles and conducts inspections using a procedure similar to that for scheduling industry safety inspections. In recent years, OSHA's health inspection program has been increasingly driven by complaints, leaving fewer resources for targeted inspections. Because an area office is required to complete an inspection cycle once it is started, some area offices, in 1988, were still working on their 1985 or 1986 inspection cycles and completing only a handful of targeted health inspections each year.

Conducting Inspections

As shown in figure II.1, the worksite inspection begins with an opening conference in which the inspector explains the reason the worksite was selected, the purpose of the visit, and the scope of the inspection. After the opening conference, the inspector reviews the injury and illness log and begins a walkaround of the work areas for compliance with OSHA standards. While inspecting, the inspector observes worksite conditions, consults with workers, and examines records. Any unsafe or unhealthful working conditions are pointed out to the employer and

Figure II.1: OSHA Inspection and Citation Resolution Process



[a]Instance-by-instance citations are approved by regional administrator and OSHA headquarters. Other citations are approved by area office director.

worker representatives. After the inspection, a closing conference is held. The inspector discusses with the employer the unsafe or unhealthful conditions observed and indicates the apparent violations, correction procedures, and interim methods of control.

Issuing Citations and Assessing Penalties

A citation is issued when safety or health hazards have been identified during an inspection. The citation describes the standard violated, proposes the penalties (if any), and establishes the date by which the employer must abate (eliminate) the safety or health hazard.

An employer who disagrees with any aspect of the citation can request an informal settlement conference with the OSHA area office director. Issues discussed in the settlement conference include such matters as the type of violation (for example, whether it was serious or nonserious), the amount of the penalty, the abatement actions to be taken, and the date by which abatement must occur. If a settlement is reached, an informal settlement agreement is signed.

If an agreement cannot be reached at the informal settlement conference, the employer can file a notice of contest within 15 days of the issuance of the citation. Employers can contest a violation if they believe it did not occur, the violation was less serious than cited, the abatement period is unreasonable, or the penalty was excessive. The Occupational Safety and Health Review Commission (OSHRC) will hear the case and render a decision.

Under certain circumstances, OSHA can refer the case to the Justice Department for criminal prosecution. The act allows criminal penalties (1) if an employer willfully violates an OSHA standard, resulting in a worker's death, or knowingly makes false representation and (2) if a person knowingly tells an employer that an inspection is scheduled without authority from the Secretary or his designees.[2]

Verifying Abatement

Abatement is the elimination of an identified hazard. It can be accomplished in a variety of ways, including (1) changes in the facilities, machinery, materials, or work practices used or (2) addition of personal protective equipment for workers. Sometimes employers will abate a hazard as soon as it is pointed out by an inspector; employers, however,

[2]The maximum penalty is $10,000 or imprisonment for 6 months or both. But telling an employer about a pending inspection carries a maximum fine of $1,000 or imprisonment for 6 months or both.

are generally allowed additional time to abate a hazard. The citation specifies the date by which an employer must abate a hazard and inform the area office of that fact.

If the employer contests the citation, abatement is further delayed until resolution of the contest in a formal settlement or a decision of OSHRC. If an employer contests the penalty or only part of the citation, all uncontested items must still be abated by the dates indicated on the citation and the corresponding penalties paid within 15 working days of notification. However, employers need not abate hazards related to contested sections of the citation until a final decision is made.

The procedures for obtaining abatement in imminent danger situations are somewhat different. Imminent danger is defined as

"any conditions or practices in any place of employment which are such that a danger exists which could reasonably be expected to cause death or serious physical harm immediately or before the imminence of such danger can be eliminated through enforcement procedures otherwise provided by this act."

Workers can identify potential imminent danger situations and request an inspection or the inspector could note such dangers during the inspection.

As soon as the inspector concludes that conditions or practices exist that constitute an imminent danger, the employer is advised. It is the duty of the inspector at the site of an imminent danger situation to encourage the employer to do whatever is possible to eliminate the danger.

If the employer either cannot or does not voluntarily eliminate the hazard, the inspector notifies the area director, who decides whether to post on site a Notice of Alleged Imminent Danger. This notice does not constitute a citation of alleged violation or a notice of proposed penalty. It is only a notice that an imminent danger is believed to exist and that the Secretary of Labor will be seeking a court order to restrain the employer from permitting workers to work in the area of the danger until it is eliminated.

The regional administrator is notified and, in turn, ensures that the OSHA director of field programs is notified before a temporary restraining order is sought. According to OSHA officials, four restraining orders were obtained between fiscal years 1984 and 1988.

OSHA has several methods for confirming that abatement has taken place. Currently, the method used most often is written assurance from the employer.

Roles of Employers and Workers

Employers Are Expected to Provide Workplaces Free From Safety and Health Hazards

Each employer is required, under the act, to provide workers with employment that is free from recognized hazards that are causing or that are likely to cause serious physical harm or death.

Some safety and health standards set by OSHA provide information to employers about how they are expected to meet that requirement. Such standards encompass many hazards in many industries, and are not limited to substances alone. They apply to work processes, equipment, and training requirements for certain categories of workers as well as to hazardous chemicals. Employers are expected to be knowledgeable about, and comply with, over 700 federal OSHA standards.

In addition to specific standards, OSHA also issues voluntary guidelines for employers. For example, in January 1989, the agency issued voluntary guidelines, encouraging employers to establish safety and health programs. Other organizations' guidelines, such as the Centers for Disease Control's recommendations for protection against bloodborne diseases, have also informed employers about procedures to protect workers. Some of these guidelines have been used by OSHA as evidence that employers who operate counter to the guidelines are failing in their general duty to maintain a safe workplace—and thus OSHA has cited them, using the "general duty" clause of the act.

OSHA has also initiated programs to provide recognition for employers who maintain exemplary safety and health programs. These programs, known as voluntary protection programs, were adopted by OSHA in 1982. The purpose of these programs is to (1) recognize qualified employers whose safety and health programs far exceed federal requirements and (2) encourage more employers to provide outstanding worker protection. The safety and health programs include management systems for preventing or controlling occupational hazards; these programs provide the best feasible protection at worksites, even beyond OSHA standards. Participants are removed from OSHA's programmed inspections, thus freeing OSHA's inspection resources to be used more effectively. In fiscal year 1989, 64 worksites participated in the program.

The voluntary protection programs have shown that a more cooperative approach to worker safety and health between government, industry, and labor can be achieved. OSHA has recognized that compliance with its standards cannot accomplish all of the goals established by the act, nor will the standards cover all unsafe conditions in the workplace. These

programs are based on the premise that having a comprehensive voluntary safety and health program that operates effectively can provide increased worker protection with fewer agency resources.

Workers Are Expected to Follow Procedures Established to Protect Them

Workers are expected to comply with procedures established to protect them. To assist them, employers are required to inform workers of the chemical hazards to which they may be exposed at work and what precautions they should take. OSHA also requires employers to (1) post a notice informing workers of their rights under the act and (2) provide workers access to records on injuries and illnesses that have occurred in the workplace. Workers can also request information on any substance from NIOSH.

The act provides that workers can inform OSHA when employers are not providing a safe workplace. Workers have the right to be represented in OSHA walkarounds, to report violations to the compliance officer during an inspection, and to request an inspection when they believe that an imminent danger or a violation of a safety or health standard that threatens physical harm exists.

Section 11(c) of the act protects workers against employer reprisals for exercising the above rights or any other rights included in the act. In order to carry out the mandate to protect workers against employer reprisals, OSHA operates a discrimination complaint investigation program. Through this program, OSHA investigators examine complaints of employer reprisals and determine whether or not to pursue complaints through the courts.

Education and Training

The Congress acknowledged the need for workers and employers to be knowledgeable about workplace hazards in order to achieve the objectives of the Occupational Safety and Health Act, and OSHA provides education and training for workers and employers through both agency-funded activities and employer-funded activities. Directly funded activities include the employer consultation program, the OSHA Training Institute, the New Directions Grant Program, and publications. In addition to these directly funded activities, there are more than 100 OSHA standards and guidelines that mandate or recommend minimum levels of training to be provided by employers for particular categories of workers. OSHA also expects education and training to be a component of its other activities, such as conducting inspections.

Consultation

Education and training directly funded by OSHA are aimed primarily towards employers. OSHA's primary emphasis in education and training has been on the Employer Consultation Program, which, in each year since 1982, received at least 70 percent of all the education and training funds. The funds devoted to this program alone constitute approximately 10 percent of OSHA's overall budget for fiscal year 1989.

Employers who want help in identifying and controlling safety and health hazards may obtain free consultation assistance under the Consultation Program, which is funded by OSHA and the states. The program is designed to assist smaller businesses in high-hazard industries or with especially hazardous operations. The proportion of federal funds to state funds varies from state to state, depending on what type of agreement the states have with federal OSHA. In fiscal year 1988, 29 states and U.S. jurisdictions provided consultation services to employers through agreements in which 90 percent of the program's funding comes from federal OSHA and 10 percent comes from the states; 23 states provided consultation services in which federal OSHA funds 50 percent of the cost of the service and the states fund 50 percent.

The program is provided to employers on a confidential basis. No citations are issued or penalties proposed for hazards identified by a consultant. An employer is, however, obligated to correct serious job safety and health hazards promptly. OSHA does not require employers to provide workers with information about hazards identified by a consultant or about recommended abatement measures.

OSHA Training Institute

The OSHA Training Institute provides short-term basic and advanced training and education in occupational safety and health for the public and private sectors. Training programs are designed to (1) improve the skill and knowledge of personnel engaged in work related to the act and (2) train and educate employers and workers in the recognition, avoidance, and prevention of unsafe and unhealthful working conditions. During fiscal year 1988, the institute trained 7,842 people. About 16 percent of those attending courses at the institute in 1988 were private sector employers and employee representatives.

New Directions Grants

New Directions, the agency's training and education grant program, makes funds available to nonprofit labor and employer organizations

that want to provide job safety and health training to their memberships. The grants are designed to develop job safety and health expertise in recipient organizations. Generally, grantees become independent of federal funding after a 3-year to 5-year developmental period.

OSHA is able to selectively target certain groups of workers and employers through New Directions grants. Currently, OSHA is not awarding new grants; targeted groups have, therefore, been limited to those groups that have already been awarded grants and are finishing out their 3-year to 5-year developmental periods.

Mandated Worker Education and Training

In addition to these formal programs, there are regulations and standards issued by OSHA that are aimed specifically at increasing the level of knowledge among workers about health and safety hazards. More than 100 of OSHA's current regulations and standards contain some requirement for training. These include the OSHA Access to Records regulation and the hazard communication standard. The Superfund Amendments and Reauthorization Act of 1986, title III, also provides for making workers aware of hazards. In addition, OSHA has issued voluntary guidelines to assist employers in identifying training needs of workers.

The OSHA Access to Records regulation, as revised in July 1978, states that workers have the right to examine the illness and injury logs of employers, as well as summaries of recorded occupational injuries and illnesses in their worksites. Since 1980, workers have also had the right to examine workers' exposure and medical records. The workers' right to information also extends to information about toxic substances to which they may be exposed in the workplace.

The hazard communication standard, issued first in 1983 and revised in 1986 and 1987, requires chemical manufacturers, importers, and distributors of hazardous chemicals to (1) describe known hazards on material safety data sheets (MSDSs), which must be provided to employers to whom chemicals are shipped, (2) label containers of such chemicals, and (3) update the MSDSs whenever information changes significantly. Employers, in turn, are required to institute programs ensuring that (1) the information provided to them is communicated to workers who handle these chemicals and (2) workers are aware of their right to obtain such information. Employers who must prepare or have available

MSDSs for hazardous chemicals in their worksites must also submit chemical hazard information to state emergency response commissions, local emergency planning committees, and local fire departments.

The Superfund act requires OSHA to issue a standard to provide workers engaged in hazardous waste operations with protection at least equivalent to that provided by EPA. The standard was mandated to cover various areas of worker protection, including site analysis, training, medical surveillance, and protective equipment. The final rule, which was published on March 6, 1989, and became effective March 6, 1990, protects approximately 1.75 million workers who work with toxic wastes, including those who respond to hazardous waste spills, such as firefighters, police officers, and ambulance and hazardous materials personnel. The standard also protects workers who are involved with operations at uncontrolled hazardous waste dump sites and workers at waste storage, treatment, and disposal facilities.

Several training requirements are included in the standard. One of these is that workers who work in hazardous substance removal operations will be required to have at least 40 hours of initial training before entering a site and at least 3 days of actual field experience.

Comments From the Department of Labor

U.S. Department of Labor

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

JUN 19 1990

Mr. Franklin Frazier
Director of Education
and Employment Issues
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Frazier:

This is in response to your letter of May 4 to Secretary of Labor Elizabeth Dole submitting for our review and comment the proposed report of the General Accounting Office (GAO) on alternative ways to improve safety and health in the workplace.

Having worked closely with your staff in the two years it has taken to complete the study, we wish to commend you on a report well done. GAO has presented a comprehensive overview of the problems that Secretary Dole and I faced as we assumed direction of the Occupational Safety and Health Administration (OSHA). In the past year, as you are aware, there have been significant changes in OSHA's operations, and many new initiatives are in the planning and developmental stages. It is too soon, however, to evaluate the impact of these changes. GAO's report, which reflects information that was current last summer and thus predates OSHA's current leadership, will provide a valuable baseline from which we can measure our success.

GAO suggests a number of interesting administrative and legislative solutions to the problems outlined in the report, and presents the advantages and disadvantages of each solution, or option. We have not commented on those options; all deserve careful review. I can assure you that the suggestions for administrative change to the OSHA program will receive our serious attention in the coming months.

We welcome the assistance the report can provide in the agency's continuing efforts to make the national job safety and health program more effective. Secretary Elizabeth Dole and I are committed to whatever changes are necessary to improve safety and health conditions for America's workers. Indeed, we are already launched on an ambitious re-thinking of OSHA's programs and policies. To assist us in this effort, we are seeking ideas and suggestions from all the concerned parties.

Shortly after I assumed office in October, a conference of the agency's senior managers was convened in Miami. In a departure from previous practice, representatives of our important constituencies were invited to attend. Our House authorizing subcommittee, the State OSHA programs, and representatives of

labor, business, and public interest groups were invited to join the agency's senior managers in brainstorming. The goal was to come up with innovative solutions to the challenges OSHA faces. Many months and task forces later, we have put into effect some of the hundreds of good suggestions that came out of the Miami meeting, and we are in the process of sorting out others for further consideration.

In addition to regular meetings with our three statutory advisory committees, we have held or are planning to hold a number of conferences with interested and knowledgeable parties outside the agency. For example, we met in March of this year with the Surgeon General and senior officials of the National Institute for Occupational Safety and Health to determine how to better coordinate our respective activities to achieve our common mission. On June 21, we will be meeting with representatives of worker compensation insurance companies to discuss issues of mutual interest. A conference with the parties concerned with safety and health in the petrochemical industry is planned for the Fall.

To ensure the orderly consideration of the many new ideas pouring into us from these sources, I have set up a new, internal decision-making process. An agency policy review board comprised of OSHA's senior managers now meets at least once a month to evaluate new policy initiatives or proposals for change in existing policies and to recommend options for my consideration.

It should not surprise you that there are similarities between OSHA's own, ongoing self-analysis of its programs and policies and the analysis in GAO's report. There are also differences. Our specific comments, which follow, address those differences.

Regulatory Strategy

OSHA defines its regulatory strategy somewhat differently from GAO. Given the limited reach of agency inspections, OSHA relies to a large extent on voluntary compliance by employers and employees. Ideally, enforcement actions, with appropriate citations and penalties, should be necessary only when employers fail for whatever reason to consider safety and health as an integral part of their responsibilities to employees. OSHA consequently has developed a regulatory strategy that combines rigorous enforcement with intensive educational and assistance efforts. Not only does the agency promote training and education through formal training and assistance programs and the training requirements in many OSHA standards, but training and education are integrated into every major agency activity.

Deterrence

The success of OSHA's regulatory strategy depends upon strong incentives for all employers, inspected or not, to comply with the requirements of the OSH Act. GAO describes OSHA's policy of issuing large dollar penalties for particularly egregious violations of the OSH Act, but does not note the significance of that policy in maximizing the impact of a single inspection. In recent years, under this policy, OSHA has used the civil penalty process to emphasize the seriousness of safety and health violations and to multiply the deterrent effect of a single inspection. Since 1986, OSHA has issued approximately 100 citations to approximately 90 employers for egregious violations. Almost two-thirds of these cases have been settled prior to a hearing, thereby securing swift abatement of hazards. Many of the presently contested citations are close to settlement. We are convinced that this extremely high settlement rate is a direct result of the business community's recognition of the Department's commitment to well-documented inspections and to pursuing litigation if necessary.

Nor does GAO note the significance of OSHA's corporate intervention strategies as a means of maximizing the impact of a single inspection. In a number of instances, OSHA has been able to get agreement from the parent corporation of a plant that has been inspected, not only to correct the violations found on that inspection, but also to make similar corrections in other plants where the same violative conditions exist. For example, OSHA's first egregious cases in the poultry and red meat industries resulted in agreement by the parent corporations to implement ergonomics programs in all their plants. To date, we have entered into 13 corporate-wide settlement agreements in a number of industries including automobile and paper manufacturing. Monitoring the implementation of corporate-wide settlement agreements is becoming an increasingly important part of OSHA's compliance program.

OSHA is considering other corporate-intervention strategies. A recent example of successful OSHA intervention at the corporate level was the agency's review, during an investigation of employee complaints, of employee medical records at the corporate headquarters of two asbestos-removal firms. OSHA supplemented this headquarters paper review with employee interviews. The approach used in these two cases proved effective and efficient. OSHA was able to accomplish its objective of uncovering and correcting serious violations of the asbestos standard without visiting the many separate worksites of these firms.

Survey of OSHA Compliance Officers and Supervisors

OSHA believes that throughout the report GAO places too much reliance on the results of the survey it conducted of 322 OSHA

compliance officers and 155 first-line supervisors. GAO interviewed senior managers at headquarters, but neglected to tap one of the most important sources of professional expertise in the agency--OSHA's Regional Administrators, Area Directors, and other senior field managers. All of these individuals are career professionals, some of whom have been with the agency since its inception. They are the first source I go to when I need information on how the program is working in the field or when I seek innovative ideas and suggestions for improvements. OSHA's senior field managers have a perspective and breadth of knowledge which the average compliance officer cannot have.

Measures of the Impact of the OSH Act

OSHA would like to expand on the report's discussion of the impact of the OSH Act. GAO quotes a 1985 Office of Technology study which points out a "general belief that the presence of OSHA has increased manager and worker awareness of occupational health and safety." As a safety and health professional for most of my working life, I have seen firsthand the dramatic changes that have occurred in the workplace and in the occupational safety and health community since passage of the Act. The vast majority of larger firms now employ at least one safety and health professional, as do the national labor unions. The number of industrial hygienists in this country has increased phenomenally, and OSHA's own recruiting confirms that the demand for "I.H.'s" continues to exceed the supply. A recent survey of safety and health specialists by the Bureau of National Affairs revealed that safety and health personnel in the respondents' organizations had increased by nearly 70 percent since enactment of the OSHA law in 1970.

We agree with GAO that the occupational injury/illness incidence rates do not provide a measure of the impact of the Act. Many other factors besides the OSHA program--factors such as changes in the industrial mix (which GAO notes), demographic change, the business cycle, and OSHA's recent emphasis on enforcement of its recordkeeping requirements--have influenced occupational injury and illness incidence rates. The heightened awareness of the importance of workplace safety and health that followed passage of the OSH Act also would have influenced the rates: by promoting better reporting and thus raising the rates on the one hand, and by increasing attention to workplace hazards and thus lowering the rates on the other hand.

Strengthening the Role of Employers and Workers

The report's discussion of ways to strengthen the roles of employers and workers does not, in our judgment, give adequate weight to OSHA's onsite consultation services and Voluntary Protection Programs (VPP). The onsite consultation program, which is offered by OSHA-funded State consultants free of charge

to employers at their request, is the only OSHA program specifically directed toward the small business community. It is designed to provide technical assistance to small businesses in maintaining safe and healthful workplaces. Consultants help employers to identify hazards and suggest ways to eliminate or control any unsafe conditions and practices. They assist in setting up safety and health management systems to prevent the recurrence of hazards. And they involve the employees at the site in the consultation process. In fact, the regulations governing the consultation program (found at 29 CFR 1908.6[c][1]) require as a precondition to a visit that the employer allow the consultant to confer with employees.

By presenting an insightful overview of possible administrative and legislative improvements in the OSHA program, the report offers much food for thought. We appreciate the assistance GAO has provided in our continuing efforts to seek new ways to improve safety and health in the workplace.

Sincerely yours,

Gerard F. Scannell
Assistant Secretary

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Related GAO Products

How Well Does OSHA Protect Workers From Reprisals: Inspector Opinions (GAO/T-HRD-90-8, Nov. 16, 1989).

Occupational Safety & Health: OSHA Contracting for Federal Rulemaking Activities (GAO/HRD-89-102BR, June 1989).

Occupational Safety & Health: California's Resumption of Enforcement Responsibility in the Private Sector (GAO/HRD-89-82, Apr. 17, 1989).

Occupational Safety & Health: Assuring Accuracy in Employer Injury and Illness Records (GAO/HRD-89-23, Dec. 30, 1988).

OSHA's Resumption of Private Sector Enforcement Activities in California (GAO/T-HRD-88-19, June 20, 1988).

OSHA's Monitoring and Evaluation of State Programs (GAO/T-HRD-88-13, Apr. 20, 1988).

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