

GAO

Briefing Report to the Honorable
Howard M. Metzenbaum, U.S. Senate

September 1987

MINE SAFETY

Federal Efforts to Improve Inspections and Injury Reporting



133886



United States
General Accounting Office
Washington, D.C. 20548

Human Resources Division

B-226461

September 14, 1987

The Honorable Howard M. Metzenbaum
United States Senate

Dear Senator Metzenbaum:

In response to your December 16, 1985, request and subsequent discussions with your office, we reviewed inspection practices and the injury reporting system of the Department of Labor's Mine Safety and Health Administration (MSHA). Specifically, we looked at MSHA's (1) progress toward completing mandatory regular safety and health inspections, (2) mechanisms to assess the quality of these inspections, and (3) efforts to verify the accuracy and completeness of injury reporting by mine operators.

Much of this work was presented at MSHA oversight hearings in September 1986,¹ and in a briefing report we issued to you in March 1987.² This report updates that information.

Most of our work was done at MSHA's headquarters, its data center in Denver, Colorado, and 14 offices having inspection responsibility for Colorado, Ohio, and Pennsylvania. We also did limited work in Kentucky and New York. At each location we spoke with inspectors, their supervisors, and senior managers.

We also obtained views and opinions concerning MSHA inspection practices and injury reporting from 40 mining companies, 7 major labor organizations representing about 90 percent of unionized miners, a national nonprofit advocacy firm representing miners, and 11 organizations representing mine operators. In all we spoke with over 175 MSHA and mining officials.

¹Statement of William J. Gainer on MSHA's Inspection Practices and Accident/Injury Reporting Systems, before the Committee on Labor and Human Resources, United States Senate (Sept. 25, 1986).

²Mine Safety: Inspector Hiring, Penalty Assessments, and Injury Reporting (GAO/HRD-87-71BR, Mar. 10, 1987).

To supplement our discussions, we analyzed MSHA inspection data covering fiscal years 1985 and 1986 to determine the extent to which mandatory regular inspections were made. We also examined the six mechanisms MSHA said it uses to assess inspection quality. At each agency level we obtained training records, inspection reports, inspector notes, internal evaluations of local offices, and management information reports to determine the extent to which these mechanisms were used.

To assess MSHA efforts in verifying the accuracy of injury reporting by mine operators, we examined its audit procedures, practices, and reports. We also compared state workers' compensation data of 34 mines in Colorado and Ohio with injury data reported to MSHA during calendar year 1985, to measure the extent of underreporting by mine operators. Our work was performed between February 1986 and July 1987.

PROGRESS TOWARD COMPLETING MANDATORY REGULAR INSPECTIONS

In an October 1985 report,³ we identified a shortfall in mandatory regular inspections by the metal/nonmetal administration of MSHA. Since then, MSHA has made significant progress in completing the required number of mandatory regular inspections. The data show that at the end of fiscal year 1986, 97 percent of the required inspections were done. A comparison of fiscal year 1985 and 1986 data showed that inspection hours increased by 21 percent, while hours spent on other enforcement activities decreased about 15 percent.

At one of the three metal/nonmetal field offices we visited, the Ohio office, inspectors expressed concern that the emphasis on completing the required number of inspections had caused them to compromise quality, thereby jeopardizing miner safety and health. (Inspectors at the other two field offices said no degradation in inspection quality occurred.)

Senior MSHA officials acknowledged that the Ohio office was experiencing a staffing shortage and has taken what appear to be sufficient steps to address these problems. A supervisor and four more inspectors were assigned and, in December 1986 follow-up discussions, inspectors at the Ohio office said operational improvements had been made, such as supervisory visits and regular staff meetings, and the work environment had improved to the point where they are performing high-quality inspections.

³Strong Leadership Needed to Improve Management at the Department of Labor (GAO/HRD-86-12, Oct. 21, 1985).

QUALITY OF INSPECTIONS

Senior MSHA officials said that, in their judgment, inspectors conduct quality mandatory regular inspections. This judgment is based on what these officials said were the six mechanisms they use to assess quality:

- (1) training and experience of inspectors,
- (2) supervisory visits,
- (3) inspection documentation prepared by inspectors,
- (4) periodic evaluations of district offices covering inspector work practices,
- (5) an automated management information system, and
- (6) feedback from mine operators and unions.

However, as pointed out in our September 1986 testimony, we found these mechanisms to be inadequate for fully determining inspection quality. For example,

- supervision of inspectors varied significantly and was sometimes inadequate for judging inspector performance;
- documentation describing inspection activities varied significantly and was sometimes inadequate to determine inspection coverage;
- evaluations of inspection quality were being done in only the metal/nonmetal administration of MSHA and occurred only every 3 years; and
- reports generated by MSHA's management information system, while useful as part of a quality assurance system, provide no explicit information on the quality of individual inspections.

In responding to our testimony, MSHA acknowledged these shortcomings and proposed corrective measures to improve its quality assurance program. In March 1987, the Acting Assistant Secretary for MSHA established a task force to develop an agency accountability system to provide information and feedback for managers, supervisors, and staff about the adequacy of inspection activities. Also, the coal administration is designing a program that requires (1) inspectors to identify in their inspection reports the mine areas they inspect and (2) supervisors to conduct on-site evaluations of inspectors. In the metal/nonmetal administration, supervisors are now required to accompany inspectors on mandatory regular inspections at least once a year, and each inspector's documentation practices are being reviewed. These corrective measures, if properly implemented, should strengthen MSHA's ability to assess the quality of inspections.

EXTENT OF INJURY REPORTING

The Secretary of Labor has issued regulations requiring mine operators to maintain records and systematically report mining injuries. The compliance

audit MSHA uses to verify the accuracy of reported injury data has limited effectiveness in detecting underreporting by mine operators because only 1 in every 39 mines is audited each year, audit quality varies, and inspectors seldom review all available information.

About half of the 34 Colorado and Ohio mine operators we talked with said that MSHA's reporting criteria are unclear, thereby contributing to underreporting. The others commented that in their view, there was little, if any, underreporting. Comparisons of workers' compensation claim data for lost-workday injuries with that reported to MSHA by the 34 mines showed that the underreporting rate was about 13 percent overall, and that 19 mines (about 56 percent) underreported lost-workday injuries.

To improve its verification process, MSHA has taken steps to obtain workers' compensation data. As of March 1987, 13 states have agreed to provide MSHA with this information. Preliminary work done by MSHA using state workers' compensation data shows results similar to ours. MSHA has also revised its injury reporting guidelines to better define reporting responsibilities and what are reportable injuries. In our view, these steps should improve the accuracy of reporting by mine operators.

Unions and mining associations disagree about the effectiveness of MSHA's penalty structure. All seven labor organizations and four of the nine mining associations that provided views, said MSHA's penalties are inadequate to deter underreporting. Our March 1987 briefing report showed that the average penalty in calendar year 1986 was \$27. In April 1987, MSHA began reviewing reporting violations for negligence and, according to senior officials, preliminary information indicates that 50 percent (up from 10 percent) of the violations are being judged as highly negligent and thus receiving higher penalties.

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As requested by your office, we did not obtain official comments from the Department of Labor on this briefing report; however, we discussed its contents with senior MSHA officials and have incorporated their views where appropriate. We plan to distribute this briefing report to the Secretary of Labor and to interested congressional committees and members. We will also make copies available to others upon request.

Should you wish to discuss the information provided please call me at 275-5365.

Sincerely yours,


William J. Gainer
Associate Director

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ABBREVIATIONS

GAO General Accounting Office
MSHA Mine Safety and Health Administration

MINE SAFETY: QUALITY OF INSPECTIONS AND ACCURACY OF INJURY REPORTING

BACKGROUND

The Federal Mine Safety and Health Act of 1977 (Public Law 91-173, as amended by Public Law 95-164) was created to protect the health and safety of the nation's miners. The act requires the Secretary of Labor, through the Mine Safety and Health Administration (MSHA), to conduct at least four inspections annually of underground mines and at least two inspections annually of surface mines. These inspections are intended to comprehensively assess whether mines conform to federal safety and health standards. MSHA inspection plans allow for some mines (noncoal) that operate less than full time to be inspected less frequently; underground mines twice a year, surface mines once a year.

The act also requires mine operators to maintain records and submit reports specified by the Secretary of Labor. Under this authority, the Secretary created regulations establishing a common system for reporting and record keeping of mining accidents, injuries, occupational illnesses, fatalities, and employment data. MSHA's Safety and Health Technology Center in Denver, Colorado, compiles and maintains this data.

MSHA has two administrations, one for coal mining and one for metal/nonmetal mining (e.g., sand and gravel, salt, and precious metals--silver and gold). It operates largely in a decentralized manner, delegating oversight of inspection activities and company injury reporting to its 16 districts, 28 subdistricts, and 116 field offices. These cover mining operations in the 50 states, Puerto Rico, and the Virgin Islands. MSHA's fiscal year 1987 operating budget is about \$156 million. As of October 1, 1986, MSHA employed 761 coal and 305 metal/nonmetal inspectors who were responsible for inspecting about 5,600 coal and 11,100 metal/nonmetal mines, respectively.

Mining fatalities and injury rates¹ have decreased significantly since 1978. However, MSHA data show that fatalities and injuries increased in calendar year 1986 over 1985. Fatalities increased from 124 to 132 (up 6.45 percent); the coal injury rate rose to 6.93 percent from 6.21 percent and the metal/nonmetal injury rate increased to 4.64 percent from 4.26 percent.

Historically, the most common type of coal mine fatality occurs in underground mines and involves the collapse of the mine's roof or walls. In contrast, most metal/nonmetal fatalities occur above ground and involve haulage equipment and machinery mishaps. Overall, inexperienced (new) workers suffer the most fatalities.

¹Injury rates are computed based on the number of injuries reported per 200,000 employee hours, which is roughly equivalent to the number of injuries per 100 full-time workers per year.

OBJECTIVES, SCOPE, AND METHODOLOGY

In a December 16, 1985, letter, Senator Howard M. Metzenbaum asked us to review the inspection practices and procedures of MSHA and its injury reporting system. After further discussions with his office, we agreed to evaluate

- MSHA's progress in conducting all mandatory regular inspections,
- the mechanisms MSHA uses to assess the quality of its inspections, and
- the mechanisms MSHA uses to verify the accuracy of injury reporting.²

To address the first objective, we updated information presented in two previous GAO reports³ on the extent to which MSHA was conducting mandatory regular mine inspections. We concentrated on the metal/nonmetal administration, since our earlier reports had shown that inspection shortfalls were in this area. We obtained fiscal year 1986 metal/nonmetal inspection and other enforcement activity data, compared it with fiscal year 1985 data, and discussed the differences and implications with agency officials.

To address the second and third objectives, we convened a panel of coal mining experts to assist us in (1) defining the elements of a good inspection program, (2) identifying issues related to injury reporting requirements and accuracy, (3) identifying possible data sources, and (4) determining our methodology to do this work. The panel consisted of officials from MSHA, the Bituminous Coal Operators Association, the National Independent Coal Operators Association, the United Mine Workers of America, and professors from the University of Kentucky and Pennsylvania State University.

In examining the six mechanisms MSHA said it uses to assess inspection quality, we spoke with agency officials at each organizational level. We analyzed agency policy memorandums, training records, inspection reports, inspector notes, internal evaluations of district offices, and management information reports. And we obtained the views and opinions of mine operators and union officials on inspector performance, MSHA's inspection strategy, and its responsiveness to feedback.

To evaluate the mechanisms MSHA uses to verify the accuracy of injury reporting by mine operators, we discussed MSHA audit criteria and procedures with officials at each agency level. We also examined internal MSHA studies on the process, reviewed audit reports at the MSHA locations we visited, and obtained union and company views on the injury reporting system. Further, we compared state workers' compensation data to injury data reported to MSHA in calendar year 1985 by 34 mines in two of the five states (Colorado and Ohio) included in our review (see p. 31).

²MSHA regulations also require mine operators to report certain accidents, occupational illnesses, and employment data. We did not include these in our study.

³Strong Leadership Needed to Improve Management at the Department of Labor (GAO/HRD-86-12, Oct. 21, 1985) and Mine Safety: Labor's Progress in Doing Required Inspections (GAO/HRD-86-65BR, Mar. 7, 1986).

The comparison of injury reports with state workers' compensation data was limited to claims for lost-workdays because MSHA requires that it be informed of all such injuries, and these rather than less serious ones, such as those only requiring first aid, are more likely to be the subject of workers' compensation claims. The 34 mines we selected for this analysis are not statistically representative, but we believe the results provide an indication of lost-workday injuries unreported to MSHA. Of these 34 mines, 17 were coal and 17 were metal/nonmetal; they varied according to operating status (i.e., full-time versus intermittent), size of operation (small, medium, and large), type (underground and surface), composition of workforce (union versus nonunion) and injury rate. In each instance where we found a discrepancy between MSHA and state data, we discussed the reasons for this with the mine operator or his designated staff.

MSHA Offices Where GAO Performed Work

Most of our work was done at MSHA headquarters, its data center in Denver, Colorado, and 14 offices having inspection responsibility for areas in Colorado, Ohio, and Pennsylvania. We selected these states because they provided a cross section of coal and metal/nonmetal mining operations. Ohio was specifically included at the request of Senator Metzenbaum. In all, we spoke with over 175 MSHA and mining industry officials at these locations.

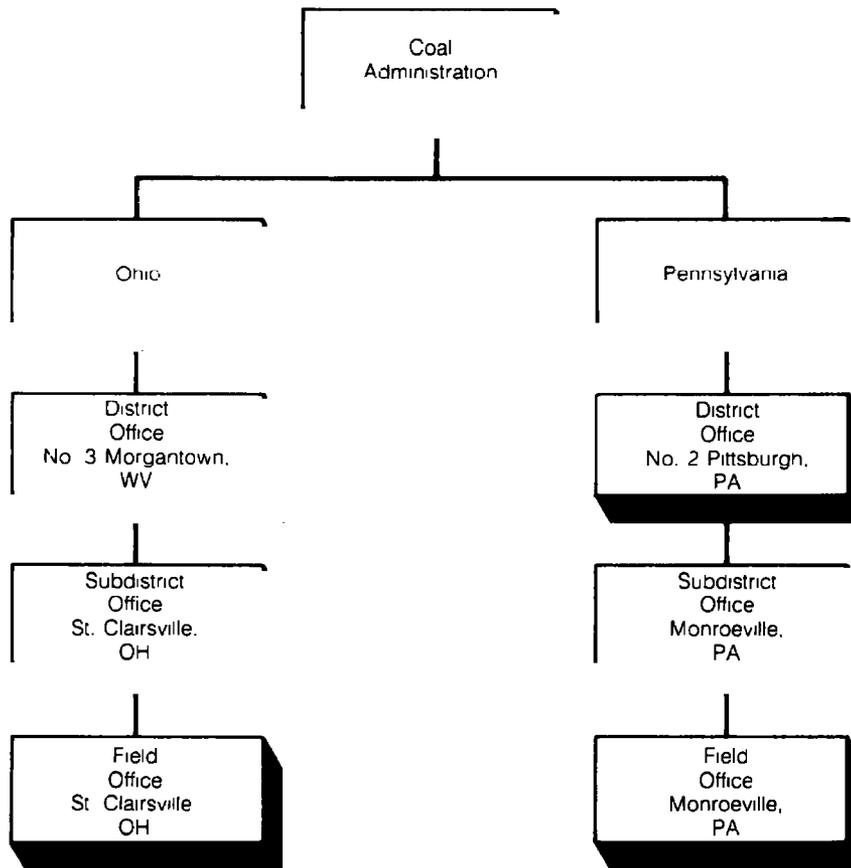
We also did limited work in Kentucky and New York. In Kentucky, we talked with officials from the Barbourville coal district, subdistrict, and field offices about their inspection strategy for small mines--those employing fewer than 50 people. In New York, we spoke with inspectors and a supervisor from the Geneva metal/nonmetal field office to determine if concerns that had surfaced at the Ohio metal/nonmetal field office also existed at this office.

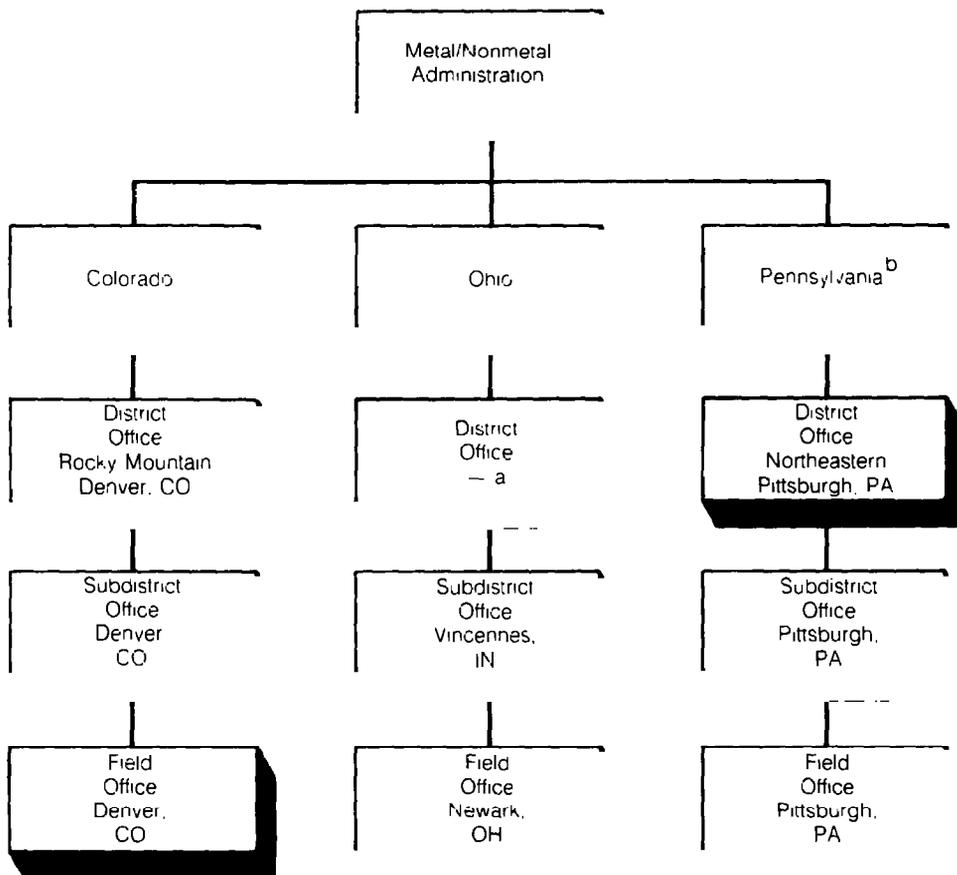
Organizations GAO Contacted

Beyond discussions with MSHA officials, we obtained the views and opinions of officials from 40 mining companies, 7 major labor organizations representing about 90 percent of unionized miners, a national nonprofit legal advocacy firm representing miners, and 11 organizations representing mine operators. We asked them to comment, for example, on the quality of inspections performed by MSHA, how responsive MSHA is to their concerns, the accuracy of injury reporting, and whether MSHA penalties deter underreporting.

We did our review from February 1986 to July 1987. As requested by Senator Metzenbaum, we did not obtain official agency comments on this briefing report. However, we discussed its contents with senior MSHA officials and have incorporated their comments where appropriate. The data we obtained from MSHA's management information system (inspection and penalty statistics) is unverified, except to the extent that we made considerable consistency checks and received assurances of the reasonableness of outputs from MSHA officials. In all other respects our work was performed in accordance with generally accepted government auditing standards.

MSHA OFFICES WHERE GAO PERFORMED WORK





^a We did not visit the North Central District office located in Duluth, Minnesota

^b In Pennsylvania our work at the metal/nonmetal offices was limited to addressing the allegations raised by inspectors in Ohio

Organizations GAO Contacted During This Review

Associations

- American Mining Congress
- Association of Bituminous Contractors
- Associated General Contractors
- Bituminous Coal Operators Association
- Mining and Reclamation Council of America
- National Independent Coal Operators Association
- National Sand and Gravel Association
- National Stone Association
- Organization Resources Counselors
- Portland Cement Association
- Salt Institute

Unions

- Heavy Construction and Laborers Union
- International Brotherhood of Boilermakers, Shipbuilders, Blacksmiths, Forgers, and Helpers
- International Brotherhood of Teamsters
- International Chemical Workers Union
- International Union of Operating Engineers
- United Mine Workers of America
- United Steelworkers of America

Public Interest Group

- Occupational Safety and Health Law Center

MSHA REPORTED SIGNIFICANT PROGRESS TOWARD COMPLETING MANDATORY REGULAR INSPECTIONS

The Federal Mine Safety and Health Act of 1977 requires that MSHA annually conduct at least four inspections of underground mines and at least two inspections of surface mines. Our October 1985 report identified a significant shortfall in the mandatory regular inspections by the metal/nonmetal administration. For example, in fiscal year 1984, MSHA data showed metal/nonmetal inspectors completed only about 60 percent of their required surface inspections. During this same period, there were no significant shortfalls in mandatory regular coal mine inspections. We recommended that MSHA give more emphasis to mandatory regular inspections, improve inspector productivity, explore the feasibility of relocating staff among district offices, and revise its management information system to show the number of inspections required, planned, and performed during the year and assess the need to hire additional inspectors to conduct the required number of inspections.

In calendar year 1985, MSHA began placing greater emphasis on completing mandatory regular inspections. As we reported in December 1986,⁴ the metal/nonmetal administration completed 97 percent of its mandatory regular inspections during fiscal year 1986. MSHA corrective measures included (1) better use of existing inspector resources, (2) improvements in its management information system to reflect an accurate mine inventory, and (3) policy changes prioritizing inspection activities.

Metal / Nonmetal Mandatory Regular Inspections and Other Enforcement Activities

Activity	No. of Events		No. of Hours		Hours per Event	
	FY 1985	FY 1986	FY 1985	FY 1986	FY 1985	FY 1986
Mandatory Regular Inspections	14,813	18,697	261,938	317,422	17.7	17.0
Other ^a	17,901	14,253	176,095	150,600	9.8	10.6
Total	32,714	32,950	438,033	468,022	13.4	14.2

^a Includes 21 enforcement activities such as determining whether previously noted violations were corrected, assisting mines in reducing the number of accidents and injuries, investigating hazard complaints, and conducting spot inspections of mines emitting excess gases

⁴Department of Labor: Assessment of Management Improvement Efforts (GAO/HRD-87-27, Dec. 31, 1986).

MSHA Reported Significant Progress Toward Completing Mandatory Regular Inspections

Findings	<ul style="list-style-type: none">● MSHA emphasized mandatory regular inspections in fiscal year 1986.● Other agency-wide enforcement activities were reduced.● Ohio inspectors said that the changed emphasis may have jeopardized the safety and health of miners.
MSHA Actions	<ul style="list-style-type: none">● Since August 1986, MSHA has assigned a supervisor and four additional inspectors to the Ohio field office.● Inspectors said that improvements have been made and they are performing high-quality inspections.● As of March 1987, inspectors have completed 100 percent of their required mine inspections.
GAO Observation	<ul style="list-style-type: none">● MSHA's actions have been sufficient to resolve concerns expressed by the Ohio inspectors.

The increase in mandatory regular inspections, however, resulted in other enforcement activities being decreased. A comparison of metal/nonmetal enforcement data for fiscal years 1985 and 1986 shows that the number of hours on mandatory regular inspections increased by about 21 percent, while hours spent on other enforcement activities decreased by about 15 percent. Total enforcement time, which includes mandatory regular inspections, increased by about 7 percent, and the average hours per event increased from 13.4 to 14.2 or about 6 percent.

The metal/nonmetal administrator told us that in order to complete all required mandatory regular inspections, given the number of available inspectors, it was necessary to cut back on other enforcement activities. Our analysis of MSHA data showed that enforcement events decreased in 11 of the 21 activities. One of the most significant decreases occurred in a program to assist companies in reducing the number of accidents and injuries--a 55.4-percent decrease in the number of events and a 63.8-percent decrease in hours. Another significant decrease came in attempted enforcement activities⁵--an 80.6-percent decrease in events and an 80.3-percent decrease in hours.

We also discussed with metal/nonmetal inspectors whether the increased emphasis on completing mandatory regular inspections had affected the quality of their inspections. All six inspectors we talked to in the Northeastern District (three in Pennsylvania and three in New York) said there was pressure to complete the required number of mandatory regular inspections, yet they made no compromises on quality. In the Denver field office, none of the inspectors we talked to said that the quality of their work had been affected as a result of the increased emphasis on mandatory regular inspections.

In Ohio, all seven metal/nonmetal inspectors expressed concern that the emphasis on completing mandatory regular inspections had, in some instances, forced them to compromise the quality of their inspections. Of these inspectors, five said the safety and health of miners may have been jeopardized. Also, the five inspectors said they cut back on other enforcement activities. For example, one inspector stated that he was directed by his supervisor to charge the time spent (27 hours) on a complaint investigation as a mandatory regular inspection even though he did not inspect any operating section of the mine. Another inspector said that he had reduced the time spent on regular inspections at some mines by not thoroughly inspecting all electrical equipment. He cited as an example one large mine that would normally take him 3 weeks to adequately inspect. Instead he did the inspection in 1 week.

MSHA data for Ohio show that from fiscal year 1985 to 1986, the number of mandatory regular inspections and the hours spent on them increased about 24 percent and 35 percent, respectively. At the same time, the number of other enforcement activities decreased 38 percent while the total time spent on these activities decreased by only about 3 percent. The average time per event for the 21 other enforcement activities actually increased from 7.9 to 12.5 hours (about 57 percent). The activities, which significantly increased in terms of hours per event, included accident investigations, discrimination complaints, verbal hazard complaints, and new equipment inspections.

⁵A mine visit specifically made for the purpose of conducting an enforcement activity, but undone because the mine was closed or some other factor interfered.

**Ohio Metal / Nonmetal Mandatory Regular Inspections
and Other Enforcement Activities**

Activity	No. of Events		No. of Hours		Hours per Event	
	FY 1985	FY 1986	FY 1985	FY 1986	FY 1985	FY 1986
Mandatory Regular Inspections	349	432	5,799	7,850	16.6	18.2
Other ^a	492	305	3,907	3,802	7.9	12.5
Total	841	737	9,706	11,652	11.5	15.8

^a Includes 21 enforcement activities such as determining whether previously noted violations were corrected, assisting mines in reducing the number of accidents and injuries, investigating hazard complaints, and conducting spot inspections of mines emitting excess gases

The Ohio inspectors told us that they increased the number of mandatory regular inspections without an increase in their workforce. (Ohio had seven inspectors, two below the authorized level.) Also, the Ohio office had operated without a supervisor for about 4 months (April through July 1986). While senior MSHA officials disagreed with the inspectors' views that the safety and health of miners was jeopardized, they acknowledged this particular office was experiencing morale and staffing problems.

Since August 1986, a supervisor and 4 inspectors have been assigned, bringing the number of inspectors to 11. One of the inspectors assigned to the Ohio office was transferred from the coal administration and had no previous metal/nonmetal inspection experience; another was a former inspector rehired at the journeyman level and was immediately able to inspect mines; the remaining two were GS-5 inspector trainees.

In follow-up discussions with inspectors in December 1986, they said that operational improvements had been made including realignment of travel areas and site visits by the supervisor. They said that the supervisor is also conducting regular staff meetings as well as reviewing inspection reports and inspector notes. The inspectors said that the work environment has improved to the point where they are performing high-quality inspections and other enforcement activities. As of March 4, 1987, MSHA data showed that Ohio inspectors were completing 100 percent of their required inspections.

In our view, MSHA's actions have been sufficient to resolve concerns expressed by the Ohio inspectors.

MSHA'S MECHANISMS FOR DETERMINING INSPECTION QUALITY ARE INADEQUATE

Senior MSHA officials said that, in their judgement, inspectors conduct quality mandatory regular inspections. This judgement is based on what these officials told us were the six mechanisms they use to assess quality.

Mechanisms MSHA Uses to Assess Inspection Quality

- Training and experience of inspectors.
- Supervisory visits.
- Inspection documentation prepared by inspectors.
- Periodic evaluations of district offices covering inspector work practices.
- Automated management information system.
- Feedback from mine operators and unions.

As pointed out in our September 1986 testimony,⁶ we found these mechanisms inadequate because they were inconsistently used. As a result, MSHA is in no position to comment definitively on the quality of inspections. In responding to our testimony MSHA acknowledged that problems exist in its use of these mechanisms. In March 1987, the acting assistant secretary established a task force to develop an agency accountability system to provide management information and feedback for managers, supervisors, and staff about the adequacy of inspection activities. Also, the coal administration has proposed a quality assurance plan with the objective of fully evaluating inspection quality. Among other things, inspectors will have to show in their notes the areas of the mine they inspect on a daily basis; and supervisors will have to conduct on-site evaluations of inspectors. The metal/nonmetal administration has also made several changes to assess inspection quality, which are discussed in the following sections.

Overall, the actions taken by MSHA are positive and in the right direction. Whether they will be sufficient to constitute a comprehensive quality assurance program, in large part depends on how well they are implemented.

⁶Statement of William J. Gainer on MSHA's Inspection Practices and Accident/Injury Reporting Systems, before the Committee on Labor and Human Resources, United States Senate (Sept. 25, 1986).

Quality Assurance Mechanism 1: Inspectors Are Adequately Trained and Experienced

Findings	<ul style="list-style-type: none"> ● Inspectors are receiving the required training. ● With few exceptions, inspectors have at least 5 years mining experience, as required by law. ● About 32 percent of MSHA's inspectors will be eligible to retire by December 31, 1988. ● At the start of our review, in February 1986, MSHA had no active hiring program.
MSHA Actions	<ul style="list-style-type: none"> ● MSHA has undertaken an intensive hiring program and increased the number of inspectors. ● The current number of inspectors will be maintained.
GAO Observation	<ul style="list-style-type: none"> ● The inspector hiring provides time to train them before most retirements take effect.

Training

MSHA requires inspector trainees to participate in a comprehensive 12 to 15 week entry-level training program and receive 6 to 9 months of on-the-job training. Training periods vary according to individual needs and experience. Formal refresher training programs and in-house seminars are routinely given to keep inspectors current on new mining technology and equipment, as well as MSHA policy changes. Both administrations have permanent committees that continually assess and evaluate the adequacy of their inspector training programs to meet the inspectors' needs.

While we made no evaluation of the quality of MSHA's training programs, our review of training records at the two coal field offices we visited indicated that the inspectors assigned to these offices have received the formal training required by MSHA. Since 1982, the coal administration has required mine inspectors to receive 2 weeks of formal refresher training every 3 years. Training records were unavailable at the two metal/nonmetal field offices we visited, but the inspectors and their supervisors told us that they have received the required formal training. In fiscal year 1987, the metal/nonmetal administration reduced its formal refresher training requirements for inspectors because of budgetary restrictions, repetitive course offerings, and the increased emphasis on completing mandatory regular inspections. Metal/nonmetal inspectors are now required to receive 2 weeks of formal refresher training every 3 years instead of every 2 years. Given the workforce's experience and the opportunity it has to take other in-house specialized training seminars, officials in

both administrations consider the level of refresher training adequate to keep inspectors current in technology, standards, and policy.

Practical mining experience

The 1977 act requires newly hired inspectors to have (to the maximum extent possible) at least 5 years practical mining experience. Both coal and metal/nonmetal administrators stated that, with few exceptions, both newly hired and established inspectors have met this minimum requirement as miners, mine foremen, superintendents, and safety directors. MSHA data show that, as of September 25, 1986 63 percent of coal inspectors and 57 percent of metal/nonmetal inspectors had met the requirements as mine managers. Another 37 percent of coal inspectors and 43 percent of metal/nonmetal inspectors met the requirements as rank and file mine employees.

Inspector retirements and hiring

MSHA records show that many inspectors are eligible to retire over the next several years. By December 31, 1988, 252 coal and 91 metal/nonmetal field inspectors (or 32 percent of all inspectors) will be eligible to retire. MSHA's last major hiring effort occurred in late 1978 and early 1979, and at the start of our review, MSHA was not hiring inspectors to offset anticipated losses.

In December 1985, the Congress provided MSHA with money to hire 90 additional inspectors in fiscal year 1986, but MSHA used the funds to help prevent possible furloughs (of 4 days) brought about by Balanced Budget and Emergency Deficit Control Act (Public Law 99-177) budget cuts. In our March 1987 briefing report, we pointed out that MSHA, acting on the fiscal year 1987 House and Senate Appropriations Committee Conference Report (99-960), had undertaken an intensive hiring program to fill 168 inspector vacancies (90 more than its fiscal year 1986 inspector ceiling). As of May 22, 1987, MSHA had made offers to, or already hired, 95 coal and 60 metal/nonmetal inspectors and had planned to hire 13 more inspectors. The inspectors are either entry-level or former inspectors hired at the journeyman level.⁸ When all hiring is complete, MSHA will employ 1,201 inspectors (828 coal and 373 metal/nonmetal inspectors), a level that senior MSHA officials said they will maintain and consider sufficient to meet the agency's legislative mandate.

Also, according to senior MSHA officials, each new inspector will receive the agency's basic entry-level and on-the-job training. Because of prior experience, reinstated inspectors will require minimum retraining to reach a fully proficient performance level. New inspectors, however, will take much longer to train, 24 to 36 months on average, to become fully proficient.

We believe that the efforts to hire new inspectors now, gives MSHA sufficient time to train them before most retirements take effect.

⁷Mine Safety: Inspector Hiring, Penalty Assessments, and Injury Reporting (GAO/HRD-87-71BR, Mar. 10, 1987).

⁸Includes inspectors that left the agency during MSHA's 1982 reduction-in-force.

Quality Assurance Mechanism 2: Supervisory Visits Are Sometimes Infrequent

Findings	<ul style="list-style-type: none">● MSHA had no requirements for supervisory visits.● Frequency (and documentation) of supervisory visits varied and was sometimes inadequate to judge inspector performance.
MSHA Actions	<ul style="list-style-type: none">● Metal/nonmetal supervisors are now required to accompany inspectors at least once a year and this requirement is part of each supervisor's performance standard.● Coal supervisors also are required to accompany inspectors, but district offices are given discretion as to frequency and documentation.
GAO Observation	<ul style="list-style-type: none">● With the requirement for supervisory visits, MSHA should be better able to judge the quality of inspections. However, implementation in the field regarding frequency and quality of supervision will determine the effectiveness of this mechanism.

Supervisory Visits Are Sometimes Infrequent

Both coal and metal/nonmetal administrators stated that supervisory visits are an important element of quality assurance. However, our work showed that neither administration had established requirements for the number or frequency of supervisory visits. Nevertheless, both administrators said supervisors were making these reviews in accordance with local directives.

At the four field offices we visited (Denver, Monroeville, Newark, and St. Clairsville), we found wide variations in the frequency and documentation of on-site visits by supervisors:

- At the Denver metal/nonmetal field office, which had two supervisors, one supervisor made no on-site visits during mandatory regular inspections in 2 years, while the other supervisor made none in the last year. During fiscal year 1986, this office completed 445 mandatory regular inspections.
- The former Newark metal/nonmetal field office supervisor rarely made on-site visits during mandatory regular inspections because, he told us, he was the only supervisor and had no administrative staff to help manage the office during his absence. One inspector at this field office commented that the supervisor had only accompanied him on two inspections in about 6-1/2 years, both of which resulted from complaints. This office completed 432 mandatory regular inspections in fiscal year 1986.
- In the Monroeville field office, supervisors are required to accompany each inspector on an inspection at least once a year for a minimum of 3 days, as well as evaluate the inspector's performance. During fiscal year 1985, the two supervisors spent an average of 4.9 days per inspector on supervisory visits.
- At the St. Clairsville field office, supervisors are required to spend 20 percent of their time in the field with inspectors. Because supervisors did not record their on-site time by activity, we were unable to determine how much time was spent on mandatory regular inspections.

The Department of Labor's Inspector General stated similar problems in a June 1982 report. In addition, reviews of district office operations (see p. 25) conducted by the metal/nonmetal administration between 1983 and 1986, found inadequate supervision in four of the six districts.

Responding to our findings, MSHA agreed that supervisory review of inspector performance has been inconsistent and both MSHA administrations have taken steps to establish supervisory review requirements. Effective October 3, 1986, metal/nonmetal supervisors must accompany each inspector on a mandatory regular inspection at least once a year. The inspection must also be of sufficient size and scope to provide an adequate basis for evaluating the inspector's performance. Supervisors are now required to record the time they spend conducting on-site inspection activities. Furthermore, these requirements have been incorporated into the supervisory performance standards. As part of its proposed quality assurance program (p. 33), the coal administration now requires that supervisory visits be made. However, district offices have discretion as to the number, frequency, and extent of documentation to be prepared by supervisors.

If properly implemented, the requirement for supervisory visits should provide MSHA with better information to judge the quality of inspections.

Quality Assurance Mechanism 3: Adequacy of Inspection Documentation Varies

Findings	<ul style="list-style-type: none">● The extent and quality of inspection reports and notes varied and were sometimes inadequate to determine coverage of inspections.
MSHA Actions	<ul style="list-style-type: none">● The metal/nonmetal administration is reviewing each inspector's note-taking practices and providing training as needed.● The coal administration has a less defined plan of action, but it now requires that each inspector document, in detail, what was inspected and what violations were observed.
GAO Observation	<ul style="list-style-type: none">● The changes to note taking and inspection reporting, if implemented properly, should provide supervisors a better means to determine what inspectors did on an inspection and to better assess inspection quality.

Adequacy of Inspection Documentation Varies

Both administrators told us that supervisors frequently rely on inspection reports and notes to assess inspector performance. The inspection reports describe the safety and health violations found during inspections. Inspector notes generally contain descriptive information supporting the written citations that inspectors issue, and are occasionally used as evidence in administrative hearings when citations are contested by mine operators. MSHA requires inspectors to prepare clear, concise, and factual notes.

At four field offices (two coal and two metal/nonmetal), we reviewed inspection reports and notes to see if information on inspection coverage and the safety and health conditions observed by inspectors were described. We found variations in the extent and quality of reports and notes describing inspection activities. In some instances, the documentation was very descriptive of the inspector's activities and findings; thus allowing supervisors to assess what the inspector did and perhaps make some judgement of inspection quality. In other cases, inspection documentation was inadequate to determine inspection coverage.

At the Monroeville coal and Newark metal/nonmetal field offices, for example, inspection reports and inspectors' notes generally provided a good description of what was inspected, tested, and found during the inspection. However, in the St. Clairsville coal and Denver metal/nonmetal field offices, notes were commonly indecipherable or nondescriptive.

In 1982, the Department of Labor's Inspector General reported that MSHA's inspection reporting inadequately identified what inspectors reviewed during an inspection. A review of district offices (p. 25) conducted by the metal/nonmetal administration between September 1983 and February 1986, indicated that the quality of note taking was a problem in all six of its districts.

Both administrations agreed that shortfalls existed regarding inspection documentation and they have taken steps to improve it. The metal/nonmetal administration has directed supervisors to conduct a systematic review of each inspector's note-taking practices and provide training as needed. Also, it established a committee to study the feasibility of developing checklists to guide inspectors toward comprehensive inspections and to supplement documentation.

The coal administration's proposed quality assurance program requires inspectors' notes to be filed with the inspection report and include detailed information on what was inspected, what health and safety conditions were observed, and whether mine operators complied with record-keeping requirements. Furthermore, each district is now required to establish a standardized system for documenting inspection results as part of the inspection report.

If implemented properly, the changes to note taking and inspection reporting should provide supervisors a better means to determine what inspectors did on an inspection and to better assess inspection quality.

**Quality Assurance Mechanism 4:
Focus of Quality Control Reviews Varies Between Administrations**

Findings	<ul style="list-style-type: none">● The metal/nonmetal administration reviews its district office operations every 3 years, covering inspector work practices and safety and health program inspections.● Inadequacies in documentation and thoroughness of inspections were common problems in all metal/nonmetal districts.● Coal administration reviews are performed as deemed necessary, focus primarily on administrative functions and internal controls, and rarely address inspector work practices.● No written reports were prepared by the coal administration; therefore, we were unable to determine either the scope or results of these reviews.
MSHA Actions	<ul style="list-style-type: none">● The coal administration has strengthened its reviews and made them a top priority.● Reviews now cover enforcement procedures and inspection activities.● Written reports are required.
GAO Observation	<ul style="list-style-type: none">● The action currently underway by the coal administration, if administrated properly, should strengthen its quality assurance system.

Focus of Quality Control Reviews Varies Between Administrations

The metal/nonmetal administration conducts periodic reviews to determine how effectively, efficiently, and uniformly its districts perform. Review teams evaluate a district office's safety and health programs and accompany inspectors on inspections to observe and evaluate their inspection practices. The coal administration reviews, however, rarely address inspector work practices. Instead, they focus on internal controls, such as whether roof control, ventilation, and mine plans were approved, and administrative functions.

The metal/nonmetal administration conducts reviews of two of its six districts each year. We examined the six evaluations conducted during the period September 1983 through February 1986. Review teams criticized inspectors in all six districts for inadequately performing certain aspects of the inspection program. For example, each evaluation noted inadequacies in note taking and thoroughness of inspections. In five district offices, inspectors were criticized for failing to issue citations for safety and health violations during inspections. The metal/nonmetal administration plans to continue its quality control reviews of two districts per year.

The coal administration told us it completed 14 reviews, spread among its 10 district offices, over the last 2 years (fiscal years 1985 and 1986). However, written reports were not prepared. As a result, we were unable to determine either the scope or results of these reviews. In responding to our concerns, the coal administration advised us that it has strengthened its reviews and made them a top priority. The reviews have been expanded to cover enforcement procedures and inspection activities, and written reports are now required. Also, a committee has been established to conduct an in-depth review of its current inspection procedures to identify areas of improvement and develop new procedures to maximize the effectiveness and efficiency of its inspection program.

The actions currently underway by the coal administration, if administered properly, should strengthen its quality assurance system.

Quality Assurance Mechanism 5: Management Information Reports Give No Explicit Indication of Inspection Quality

Findings	<ul style="list-style-type: none">● Management information reports are infrequently used by managers and supervisors.● The reports in themselves provide no explicit information on the thoroughness and quality of inspections.
MSHA Actions	<ul style="list-style-type: none">● In October 1986, MSHA entered into a 3 year interagency agreement with the General Services Administration to determine and validate it's management information needs.
GAO Observation	<ul style="list-style-type: none">● Once management information needs are fully defined. MSHA's quality assurance program should be enhanced.

Management Information Reports Give No Explicit Indication of Inspection Quality

MSHA's management information system is comprised of three distinct databases: (1) coal, (2) metal/nonmetal, and (3) employment, accident, and injury. Approximately 120 reports are routinely generated monthly, quarterly, annually, or by special request. These reports include, for example,

- the number and type of inspections completed and violations found;
- the amount of time inspectors spend on enforcement activities and support functions;
- the number and type of accidents and injuries occurring at mines; and
- mine characteristics (operating status, type of mine, number of employees, hours worked, and production tonnage).

Both the coal and metal/nonmetal administrators told us that they use various reports to monitor inspector activity and performance agency-wide. They also said that supervisors and managers at the district level and below frequently rely on various reports to monitor inspector activities and the quality of work done.

These reports provide a broad range of data for managers and supervisors to use in monitoring inspection activities and results. However, while the management information system is a useful part of a quality assurance system, the reports it produces, in themselves, provide no explicit information on the thoroughness and quality of inspections made. Also, our discussions with field supervisors and district managers indicate that they infrequently use the management information reports.

To determine and validate its management information needs, MSHA entered into an interagency agreement with the General Services Administration, in October 1986. According to a senior MSHA official, this initial study should take up to 3 years to complete. The primary objectives of this study are to (1) identify the major automatic data processing needs of managers and supervisors, as well as issues facing MSHA over the next 5 years; (2) determine the optimum configuration for data collection and entry points; and (3) determine the most cost-effective distribution of computer equipment.

Once management information needs are fully defined, MSHA's quality assurance program should be enhanced.

**Quality Assurance Mechanism 6:
MSHA Uses Operator and Union Feedback to
Monitor Inspection Practices**

Findings	<ul style="list-style-type: none">● MSHA routinely investigates all written complaints as required by the 1977 act.● Mining officials said that generally MSHA is responsive to their concerns.● Mine operators said inspectors are dedicated, highly professional individuals who perform quality inspections. Union officials' views were mixed.● Mine operators and union officials agree that inspectors inconsistently apply safety and health standards.
MSHA Actions	<ul style="list-style-type: none">● MSHA will continue to investigate all written complaints and obtain feedback from mine operators and unions on a regular basis.
GAO Observation	<ul style="list-style-type: none">● The continued use of feedback from mine operators and unions provides MSHA with a useful source of information regarding the quality of work done by inspectors.

MSHA Uses Operator and Union Feedback to Monitor Inspection Practices

Senior agency officials told us they regularly obtain and use feedback from mine operators and unions on inspector work practices and inspection activities. They said they are sensitive to operator and union concerns, which normally have some substantive basis.

At the four subdistrict offices we visited, we examined 123 written complaints made between October 1984 and April 1986, related to inspection quality and safety and health concerns, to determine whether MSHA responded to them. We found that MSHA investigated and responded to all of the complaints, as required by the 1977 act.

Furthermore, we obtained the views of mining officials representing 40 mines (17 coal and 23 metal/nonmetal) and representatives from seven labor unions. The consensus of these officials was that MSHA is generally responsive to their concerns. Mine operators said that inspectors are dedicated, highly professional individuals who generally perform quality inspections and have a positive influence on miner work practices. One prevailing concern raised by these operators, however, was that inspectors are inconsistent in their interpretation and application of the safety and health standards. As a result, a safety and health violation may be cited by some inspectors and not others.

Coal and metal/nonmetal union officials we talked with had mixed views on the quality of inspections performed by MSHA. The United Mine Workers of America's administrator for occupational safety and health stated that inspectors need to strengthen their enforcement practices, especially when dealing with small mines (those with less than 50 employees). He stated that MSHA promotes a "go easy" enforcement attitude toward small mines that has resulted in less stringent safety and health standards being applied to them. In contrast, an official from the International Brotherhood of Teamsters stated that the quality of inspections performed by MSHA is normally very good.

Four of the six metal/nonmetal union officials we talked with said that the overall quality of inspections generally ranged from good to very good. However, they said that the quality does vary among inspectors. Two union officials said that, in their view, inspectors are too often intimidated by mine operators, that there are too few inspectors, and that this results in inferior inspections.

The continued use of feedback from mine operators and unions provides MSHA with a useful source of information regarding the quality of work done by inspectors.

MSHA's Efforts to Determine the Extent of Injury Underreporting Are Inadequate

Findings	<ul style="list-style-type: none">● Compliance audits are infrequently conducted, audit quality varies, and inspectors seldom review all available information.● None of the MSHA offices we visited had working arrangements with state workers' compensation offices to share data on worker injuries.● Mine operators underreport injuries.● Mine operators said reporting criteria are confusing contributing to underreporting.● Union officials said that the current level of penalties provide inadequate incentives for operators to report injuries while mining association views are mixed.
MSHA Actions	<ul style="list-style-type: none">● Inspectors have been instructed to examine company records as part of their mandatory regular inspections.● MSHA has taken steps to obtain state workers' compensation data to verify the accuracy of injury reporting by mine operators.● In December 1986, MSHA clarified its reporting guidelines and distributed them to all mine operators.● Reporting violations are being assessed higher penalties.
GAO Observation	<ul style="list-style-type: none">● These are positive steps and, if implemented properly, should improve not only MSHA's ability to verify the accuracy of reporting, but also the extent of reporting.

MSHA'S EFFORTS TO DETERMINE THE EXTENT OF INJURY UNDERREPORTING ARE INADEQUATE

Compliance Audits

The Secretary of Labor has issued regulations requiring mine operators to maintain records and systematically report mining injuries. Inspectors are supposed to check operator reporting practices (in somewhat less detail) during each mandatory regular inspection, however, the primary tool MSHA uses to measure the accuracy of reporting is the auditing of company records (commonly referred to as compliance or Part 50 audits). Compliance audits are not routinely performed, but are triggered by an event, such as a fatal accident, a noticeable change in a mine's injury rate, a proposed safety award, or a complaint brought by a miner or union representative. During fiscal year 1986, MSHA conducted 442 compliance audits, or about 1 audit for every 39 mines.

MSHA's compliance audit guidelines call for inspectors to review company records--such as injury reports prepared by foremen, nurses, and doctors; insurance reports; and payroll records--in order to determine operator compliance. Inspectors at the Denver, St. Clairsville, and Newark field offices told us, however, that they did not normally review all available company records when conducting either compliance audits or mandatory regular inspections. Instead, they used computerized data (obtained from MSHA's data center in Denver) generated from injury reports previously submitted by the operator and matched them with the same reports the operator had on file at the mine. In effect, they check whether MSHA's computerized data matches the MSHA report on file at the mine. Inspectors in the Monroeville field office, on the other hand, generally reviewed company records as called for in the compliance audit guidelines.

In response to a MSHA task force study of the injury reporting system, inspectors have been instructed on MSHA's reporting requirements and their own responsibility to review reporting as part of mandatory regular mine inspections. Also, MSHA staff who conduct programs in accident and injury prevention at companies are now required to do audits.

Mine Operators Underreport Injuries

Stemming from a union complaint it received, MSHA established a task force in early 1985 to determine the extent of underreporting by mine operators. In its February 1986 report, the task force concluded that during calendar years 1984 and 1985 coal and metal/nonmetal operators underreported injuries (of all types) by about 13 percent and 10 percent, respectively. In terms of lost-workday injuries, the task force data showed about 9 percent underreporting by coal operators. (Lost-workday injury data were not compiled by the task force in metal/nonmetal mines.) The task force analyzed compliance audits completed at 433 mines which, they said, was not a statistically representative sample.

The task force further concluded that the reporting system is less than perfect and the agency's injury statistics are not completely accurate; but to attempt to ensure a perfect, or near-perfect system would entail a very large commitment of agency resources.

To explore further the extent of operator underreporting, we conducted a test involving 34 mines (17 coal and 17 metal/nonmetal) in Colorado and Ohio. For these mines, we compared MSHA injury data reported by mine operators during calendar year 1985 with claim data obtained from state workers' compensation offices. We limited

our test to lost-workday claims, because MSHA requires that all of these injuries be reported and the state workers' compensation offices maintained comparable data. While the number of mines we selected is not statistically representative, they provide a cross section of both coal and metal/nonmetal mines in these two states. At the time of our review, MSHA had no requirement for its field offices to have working arrangements to share injury data with their respective state workers' compensation offices. None of the four field offices we visited had such arrangements. In Pennsylvania, no injury data were available through the state because most claims are filed with private insurance companies.

Eighteen of the 34 mine operators we talked to attributed most underreporting to administrative error or oversight, resulting from confusion over MSHA's reporting criteria. The other 16 operators commented that, in their view, there is little, if any underreporting. Our analysis of the 34 mines showed that the underreporting rate was about 13 percent overall, and 19 mines (about 56 percent) underreported lost-workday injuries.

Underreporting Found by GAO

Mine	No. of Mines		No. of Injuries		Percent of Injuries Unreported
	Reviewed	Under-reporting	Requiring Reporting	Unreported	
Metal/nonmetal	17	8	92	17	18.5
Coal	17	11	228	25	11.0
Total	34	19	320	42	13.1

MSHA has taken steps to improve the injury reporting system. In December 1986, MSHA revised its injury reporting guidelines to assist mine operators with reporting. The revised guidelines better define the mine operators' reporting responsibilities and what are reportable injuries.

The agency has also taken steps to obtain state workers' compensation data and, as of July 1987, 13 states⁹ agreed to provide MSHA with this information. Preliminary results of work done by MSHA in two Kentucky districts show results similar to ours. According to MSHA documents, in one district about 30 percent of the mines examined were found to have substantially underreported, one by as much as 70 percent.

⁹Kentucky, Oklahoma, Missouri, Arkansas, Washington, New Mexico, Montana, North Dakota, Arizona, Colorado, Indiana, Maryland, and Ohio.

Union and Mining Association Views on MSHA's Penalty Structure

MSHA regulations specify that an assessment of \$20 may be imposed for safety and health violations that are not likely to cause serious injury and are abated within the time set by the inspector. However, these regulations also permit assessments of up to \$10,000, depending on such factors as the seriousness of the violation, negligence of the operator, and the history of the operator's previous violations.

As we reported in March 1987, MSHA assessed \$31,388 in penalties against mine operators in calendar year 1986 for failing to report injuries. A breakdown of the penalty assessments shows that 1,179 penalties were assessed against 333 mines in 1986, averaging \$27 per penalty and \$94 per mine. About 90 percent or 1,058 of the violations for not reporting an injury were assessed a \$20 penalty. The most \$20 violations assessed at a mine over a year was 66, resulting in a \$1,320 penalty. A total of 121 violations, or 10 percent, were assessed higher than \$20, the largest being \$160. The largest combination of penalties assessed a mine during 1986 was \$2,820.

The 1986 assessments exceeded by about \$3,600 the amount MSHA assessed over the previous 4 years combined. This increase is attributable to a December 1985 change in MSHA policy, which directs inspectors to issue citations for each instance of failure to report an injury rather than permitting multiple instances of underreporting to be cited as one violation.

In April 1987, district personnel were instructed (1) to make evaluations of the degree of negligence for violations and (2) on the use of special assessments for citations with high negligence. According to MSHA officials, preliminary information indicates that as a result of these instructions about 50 percent (up from 10 percent) of the violations are being judged as highly negligent and thus receiving special assessments and higher fines.

All of the labor organizations and four of the nine mining associations that provided views said that the penalty policy provides inadequate incentives for operators to report injuries. They said that much higher fines are needed. Some officials stated that minimum fines of \$100 to \$500 per violation would make a difference in reporting accuracy. These people generally said that operators who repeatedly underreport injuries, perhaps even those who are cited a second time, should receive much higher fines. One official commented that when the word gets out that companies will receive stiff penalties for underreporting injuries, the accuracy of the reported data will improve significantly.

Officials of the five mining associations who stated that the current penalties serve as a deterrent said that the reporting is reasonably accurate. They said that instances of underreporting occur mostly for nonserious injuries, in situations where MSHA reporting criteria are unclear, and through administrative error rather than intentional wrongdoing. These officials commented that unintentional and minor instances of failure to report injuries should not be penalized at all.

GAO PRODUCTS RELATED TO MINE SAFETY

Title	GAO Report No.	Date
Mine Safety: Inspector Hiring, Penalty Assessments and Injury Reporting	HRD-87-71BR	3/10/87
Department of Labor: Assessment of Management Improvement Efforts	HRD-87-27	12/31/86
Statement of William J. Gainer, Associate Director, Human Resources Division, before the Senate Committee on Labor and Human Resources, on the Mine Safety and Health Administration's Inspection Practices and Accident /Injury Reporting System	---	9/25/86
Mine Safety: Labor's Progress in Doing Required Inspections	HRD-86-65BR	3/07/86
Strong Leadership Needed to Improve Management at the Department of Labor	HRD-86-12	10/21/85

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