



Highlights of [GAO-07-622](#), a report to congressional requesters

## Why GAO Did This Study

The Mine Safety and Health Administration (MSHA), the National Institute for Occupational Safety and Health (NIOSH), the Federal Mine Safety and Health Review Commission, the Department of Labor's Office of the Solicitor, the states, and the mining industry share responsibility for ensuring mine safety.

GAO examined the challenges underground coal mines face in preparing for emergencies, how well MSHA oversees mine operators' training efforts, how well MSHA and NIOSH coordinate to enhance the development and approval of mine safety technology, and how civil penalties are assessed. To address these issues, GAO surveyed a representative sample of active underground coal mines, analyzed agency data, conducted site visits, and talked with agency officials and other experts. The survey results are estimated at the 95 percent confidence level.

## What GAO Recommends

GAO is making recommendations to strengthen the efforts of MSHA, Labor, NIOSH, and the Commission by improving mine operators' access to tools to train their workers, strengthening MSHA's oversight of training, improving the effectiveness of information sharing between MSHA and NIOSH, and ensuring that there is transparency in penalty appeal determinations. Each agency generally agreed with the recommendations in the report.

[www.gao.gov/cgi-bin/getrpt?GAO-07-622](http://www.gao.gov/cgi-bin/getrpt?GAO-07-622).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Daniel Bertoni at (202) 512-7215 or [bertonid@gao.gov](mailto:bertonid@gao.gov).

## MINE SAFETY

# Better Oversight and Coordination by MSHA and Other Federal Agencies Could Improve Safety for Underground Coal Miners

## What GAO Found

Underground coal mine operators face significant challenges preparing for emergencies, including ensuring that miners receive realistic training and organizing mine rescue teams that satisfy new requirements. While mine operators recognize the importance of providing training in an environment that simulates an emergency, many of them are challenged by having limited access to special training facilities and meeting the cost of providing such training. MSHA has materials for providing specific hands-on training for mine emergencies, but it does not provide all mine operators with information and tools for training under simulated emergency conditions. In addition to the challenges of providing miners with realistic training, mine operators anticipated challenges in implementing the mine rescue team requirements in recent legislation, such as meeting the requirement to conduct training annually at each mine covered by a mine rescue team.

MSHA approves mine operators' training plans and inspects their training records, but its oversight of miner training is hampered by several factors. MSHA has general guidelines for items to be considered when approving new instructors, but its standards are inconsistent, and it has no continuing education requirements for instructors. MSHA also does not have current information on its instructors and does not ensure that they keep their knowledge and skills up to date. In addition, MSHA does not adequately monitor instructors or evaluate training sessions, and does not assess how well miners are learning the skills being taught.

MSHA and NIOSH have a common mission to improve the safety and health of coal miners, but do not have a current memorandum of understanding to guide their coordination efforts or formally involve each other in strategic planning efforts. As a result, coordination between the two agencies is largely informal and inconsistent. Most of the coordination that occurs is initiated by individual staff members or by outside parties. Such informal coordination may not be sufficient given the pending retirements of many engineers and scientists and other challenges that both agencies face.

While most of the penalties proposed by MSHA are paid by mine operators without opposition, a small percentage of the cases involving more serious and higher dollar penalties are appealed, and those appealed are reduced significantly. Between 1996 and 2006, MSHA proposed assessing mine operators 506,707 penalties for violations of underground coal mine safety and health standards—at an average penalty amount of \$234 per violation. MSHA uses a standard formula to propose penalties, but the other entities involved in the appeals process such as Labor's Solicitor's Office use considerable discretion in deciding on the final penalty amount. Approximately 6 percent (31,589) of the violations were appealed by mine operators. About half of the penalties for the appealed violations were reduced by an average of 49 percent, regardless of the seriousness of the gravity of the violation and the degree of operator's negligence.